

UNIVERSITY OF TORONTO



3 1761 01355005 8

HV
5060
R484



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

DIALOGUES ON DRINK.

BY

BENJAMIN WARD RICHARDSON,

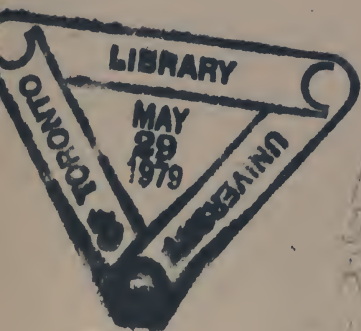
M.D., LL.D., F.R.S.

NEW YORK:

National Temperance Society and Publication House,

58 READE STREET.

1882.



HV
5060
R426

INTRODUCTORY DEDICATION.

TO THE HONORABLE WILLIAM COLLINS,

Lord Provost of Glasgow.

MY DEAR LORD PROVOST:

The request expressed by you and your colleagues of the Scottish Temperance League, that I should write a plain and familiar Essay on the Temperance question, is fulfilled in the work herewith presented to the public.

An incident which occurred as I commenced to write, coupled with a remark made by you that I should keep as free as possible of technicalities, and should present some of the leading topics on Temperance in conversational language, led me to construct the Essay in the form of Dialogue.

The Dialogue is constructed on the idea of the accidental meeting, in a country place, during an autumnal holiday, of three friends, who hold a series of conversations on the subject of alcohol. The meeting, the place of meeting, and the persons are all—according to the usual method of planned dialogue—assumed. But the arguments and facts advanced by the supposed speakers, are based on the actual observation and practical experience of the author.

By this plan I have made, I trust, some subjects, which would otherwise be dry and hard to read and digest, more

acceptable to the majority of people who wish to become conversant with the present position of the advocates of total abstinence from the use of intoxicating drinks. The work must answer for itself as to whether this object has been attained.

I have only, by way of preface, one further duty to discharge, the most pleasant duty of dedicating the book to your Lordship, who for so many years, and through all report, has so earnestly, so zealously, so efficiently worked for the great cause of Temperance.

Your father led this cause in Scotland and in London. You, following in his footsteps, have lived to see the first-fruits of his labors, and of those who labored with him.

That your useful life may long be spared to promote the continued progress towards perfection of the great reformation of this age, is the most earnest wish of,

MY DEAR LORD PROVOST,

Yours ever faithfully,

BENJAMIN WARD RICHARDSON.

CONTENTS.

DIALOGUE I.

Dialogue Introductory and Friendly—Accidental Meeting of Three Friends—The Question of Temperance, 9-12

DIALOGUE II.

Education and Intemperance—Failure of Education to Insure Temperance—The Educated Intemperate, 13-23

DIALOGUE III.

Subject of Influence of Education continued—Corrective Effect of Education more fully stated—Fallacies—Alcohol as an Agent producing a New Constitution of Body and Mind—The Educated not Exempt from the Influence—Moderation a Failure, ... 24-36

DIALOGUE IV.

Total Abstinence in Social Life—Solution of Social Difficulties—Results of Prodigal Mirth—Results of Early Training in the Use of Wine—A Case in Point—A Wise Quotation, ... 37-45

DIALOGUE V.

Wine-Tasting Fallacies—Delusions respecting Wines—Deceptive Strong Drinks—Poisonous Action of Fusel

Oil or Amylic Alcohol—Properties of Amylic Alcohol—Greek Wines—Bad Effects of Pure Alcohol on Health and Life, ... 46-55

DIALOGUE VI.

Revival of the "Night-cap" Question—Night-cap Fatality—Effects of Moderate Indulgence—A Case in Point—Double Dangers from Insidious Action of Alcohol—Exceptional Long-lived Drinkers—Another case in Point—Reasons for Exceptional Examples, ... 56-67

DIALOGUE VII.

Observations on Natural Sleep—Imperfect Sleep induced by Alcohol—Example in the Young—Danger of Sleep after Wine—Difference between Sleep and Narcotism—Death from Alcoholic Narcotism—A Case in Point, . . . 68-77

DIALOGUE VIII.

The Hypothesis of Natural Craving for Stimulants—Craving *versus* Prohibition—The Instinctive Desire Question—The Craving in Higher and Lower Animals—Craving in Relation to Education—Brain-work under Stimulants—Fallacies—Extra Alcoholic Stimulants—Sir Humphrey Davy and Nitrous Oxide—Ether Drinkers, . . . 78-92

DIALOGUE IX.

Ether-drinking—Origin of the Practice—Its Existence in Ireland—Social Effects—Physical Effects—Action of

Ether as an Intoxicant—Comparisons with Alcohol—
Ether *versus* Alcohol—Ultimate Effect of Ether on the
Body—Further Comparisons, ... 93-108

DIALOGUE X.

Craving considered as an Aberration—Alcohol Foreign
to Living Action—An Intoxicated Engine—Alcoholic
Excitement poor in Comparison with some other Excite-
ments—Life under Nitrous Oxide—Life under Haschish
—The Moral, ... 109-125

DIALOGUE XI.

The Registrar-General's Thirty-ninth Report for England
—The Appendix on Alcohol—Apologies for Alcohol—
Mortality from Alcohol—Mortality of Publicans and
Grocers—Alcohol compared with Medicinal and Poison-
ous Agents—Fallacy of Personal Experience in use of
Alcohol—Inconsistencies of Knowledge and Practice—
A Case in Point, ... 126-141

DIALOGUE XII.

A Convert to Total Abstinence—Modes of Converting to
Abstinence—Summing up of a Moderate Drinker—The
Savage Residuum—Treatment of Exhaustion, Coldness,
and Feeble Heart without Alcohol—Sudden Cessation
of Habit of Drinking Alcohol—The Practice Sound—
Proofs—Injurious Action of Alcohol on Brain Workers
—Farewell, ... 142-155

DIALOGUES ON DRINK.

DIALOGUE I.

DIALOGUE INTRODUCTORY AND FRIENDLY—ACCIDENTAL MEETING
OF THREE FRIENDS—THE QUESTION OF TEMPERANCE.

Juridicus. My dear Physicus, I hope you have slept well, and I assure you it is most gratifying to me and to my good wife Helena, to have you under our roof in this delightful country place.

Helena. We are indeed glad. It was so fortunate that you, in your autumnal wanderings, should stumble upon us as you did. Had we not met in our walk, you would have passed our door, and have been none the wiser about us.

Physicus. The gratification, my kind friends, is, I assure you, on my side, or it ought to be; for I am not only surprised, but greeted and entertained, and above all, by Juridicus and his wife.

Helena. I suppose that "Juridicus" is one of your old schoolboy names?

Physicus. Yes. Your husband was always so grave, we called him from the first day he ever entered our class "Juridicus," "The Judge," and you see our boyish christenings are being justified by the good opinion of the world. Juridicus is confirming our anticipations, and never do I remember a happier task than when I sat down to congratulate him on his last distinguished promotion in his profession.

Juridicus. Physicus, you are too generous.

Helena. So let it be. There is not so much generosity in the world that we can afford to lose any of it. But pray, tell me why you were called Physicus?

Physicus. That is easily told. I had an uncle who was in the profession of medicine, and who led me into the same path from the time I could walk; and he, writing to our Principal of the school, requested, in his old-fashioned whimsical manner, that I should be specially instructed in the "physicals." As a matter of course, I got the school name of "Physicus" on the spot.

Helena. Every one had some such name, I suppose?

Juridicus. Certainly; not excluding the master himself, dear old Ptolemy.

Helena. Why, pray, was he called "Ptolemy"?

Physicus. There was a boy in the school who told us such fearfully sad and dismal stories about our faults and failings, that we all got miserable whenever he commenced to descant on his favorite topic; so we named him "Hegesias," after the Cyrene philosopher who did the same sort of thing. At last matters got so wretched that the master had "Hegesias" up before him, as Ptolemy had the real Hegesias, and forbade our miserable comrade, on pain of expulsion, to speak another word on such doleful subjects. The master thereupon became "Ptolemy," and reigned as such until he died.

Helena. Well, now that my woman's curiosity is fed as to the origin of your fanciful names, I am so far satisfied, and we will, if you please, proceed to breakfast.

Juridicus. We can, I feel sure, suit you at breakfast and tea, Physicus, but as to luncheon and dinner I dare not be so positive. You will, I fear, be shocked to see that, notwithstanding all your warnings and teachings, we still have refused to shake off the old Adam, and are unprovided with any substitute for your special needs.

Physicus. You mean you have not yet given up wine, and have no substitute for it?

Juridicus. Precisely so.

Physicus. You have not, I hope, discarded water altogether?

Helena. No, "Physicus," if I may venture to adopt your schoolboy cognomen, we have not, I assure you. We have beautiful water here, fresh from a spring that might have been the Hyperia.

Physicus. Then you have at hand all I ask for or need. There is no substitute for water, and none is required.

Helena. I quite believe you, and I have read so many of your works, and of those of other men who have written on the subject, that you have almost persuaded me to be a water-drinker.

Juridicus. Yes. I actually found her the other day writing out the chemical formulæ of the alcohol series, and getting herself up in the radicals, and, in truth, during vacation I was about to follow in her steps. For, joking apart as to the old Adam, I am becoming solemnly convinced, even from my professional side of the question, that you and your friends must be right in the main.

Physicus. You mean, from the evidence that comes before you as a lawyer.

Juridicus. That is what I mean. Day by day I read in the faces of the criminal class one influence, strong drink, until at last I am as familiar with the strong-drink face as you can be. It assumes various types, is modified by racial peculiarities, but it stares through all, and now I know it as if it confessed itself, until the fact is impressed on me that although there may be few criminals, comparatively, who are not drunkards, there are fewer drunkards who are not criminals.

Physicus. I have observed that two of our most learned judges have spoken from the bench on this point of crime and intemperance, tracing out the connection.

Juridicus. I think that three of them, perhaps four, have so spoken.

Physicus. I remember well that Mr. Justice Grove was very decided in what he said. He declared his belief that nine out of every ten of the cases of criminal violence that came before him were examples of the effect of drink on the criminals.

Helena. Such evidence, to us women who are unsophisticated in details of crime, is perfectly fearful.

Physicus. And coming from the lips of such a man as Mr. Justice Grove, it is the more to be relied on; for he speaks as a natural philosopher, not less than as a judge; as one who will be remembered in the future as Lord Bacon is remembered, rather because he introduced a new philosophy than because he wore the ermine.

Juridicus. His words have, as you say, great weight, and I almost envied him that he had said them first, for I might have spoken them without hesitation, on similar evidence.

Physicus. We shall have you both as converts to total abstinence, I plainly see.

Juridicus. Don't be too sure of that, my friend. There are many points on which I must be convinced before I cross your temperance river, and burn my wine boats on the other side. Wine floats me when I am heavy, and is a friend in need.

Physicus. A treacherous one.

Helena. Aye, there's the rub; but come, the breakfast waits, let us discuss that first, and the wine question afterwards.

DIALOGUE II.

EDUCATION AND INTEMPERANCE—FAILURE OF EDUCATION TO
INSURE TEMPERANCE—THE EDUCATED INTEMPERATE.

Helena. I observe, Physicus, that a garden is to you a great delight.

Physicus. Indeed, madam, I think with my friend Sir Walter Raleigh, that a house without a garden is only half a house. I would give every Londoner a garden, if I had my way.

Helena. On the tops of their houses?

Physicus. Surely, on the tops of their houses, on that space which at the present time is all lost in hideous roofage, and which might be a perfect forest of beauty.

Juridicus. You still retain your old love for your friend Sir Walter!

Physicus. Oh, yes. Since last we met I have been with him again round the world, as he knew it.

Juridicus. And how does he like your total abstinence?

Physicus. It suits him well. He was practically a total abstainer, though not completely advanced. He held for the use of wine on festive occasions, in which respect, I think, with much deference, he was wrong.

Juridicus. But what do you say of his great cordial?

Helena. What was that? It is new to me.

Physicus. It was a complex mixture of cordials or stimulants invented by Sir Walter, which had immense fame in its day. For curiosity I once had it made. It is pleasant to the taste, and stimulating.

Helena. And did your friend take it regularly?

Physicus. My friend took it only on emergencies. It was a cordial. It was, in fact, a medicine.

Juridicus. Which you shall prescribe for me under that invocation to Jupiter, which your superstitious physicians still scrawl at the top of your receipts, and think you are writing an abbreviated "recipe."

Helena. Now, you scholars and schoolboys, if you get to banter, and to set up the faults and failings of your respective professions, the one against the other, I know what will come of it. You will drive me away, and that at a moment when I was most anxious to resume our studies on the drink question. We have in our friend, who has come upon us so agreeably, a book that is better than a book, a book that will answer for itself, and bear cross-examination; so let us sit down, *sub tegmine fagi*, and proceed with our study. You, my dear Juridicus, were saying when we left off, that you should want to be convinced on many points before you became a convert to so extreme a measure as total abstinence. You may now, perhaps, get a reply to some of your objections.

Physicus. It will give me sincere pleasure to answer any objections to the best of my ability, although I fear you will have to give me the lion's share of the conversation.

Helena. We shall never regret that, I am quite sure.

Juridicus. Unless it converts us to teetotalism.

Physicus. And for such a result you would, in the end, be grateful. But pray tell me, Juridicus, by what means you propose to reform the terrible evils the existence of which you admitted when you referred to the relation of crime to intemperance.

Juridicus. I really on that point have no scheme of a direct and practical kind to propose.

Helena. Then you must let the evils, with all their horrors, go on as they are.

Juridicus. Lawyers are not reformers. It is no part of their business to suggest new projects. They lay down the law as it stands ; and in their mode of doing it they are obliged, at times, to describe incidentally those conditions of social life which make the laying down of the law, and the law itself, necessary evils. So, like the players, they are the very reflex of the time. For my part, therefore, I have no scheme for reforming the world from intemperance, though I may have, and indeed have, my hope that the reformation will come without any scheme whatever.

Physicus. By what means ?

Juridicus. By the progress of education and general enlightenment.

Helena. I know that is your view, and I ought to bow to your decision, as though I were a newly-fledged barrister coveting my lord's most fleeting smile. But to me, who am only one of the jury, the evidence does not seem very perfect in favor of the opinion you have uttered. There is our friend the Vicar, an educated man and most enlightened, and the argument, I regret, does not fit his case. The world buys his discourses, and all men admire his consummate learning, and yet, what is he ? There was the master of masters who taught me the divinest art, who himself, a fountain of art, would even have rivalled his countryman, Mendelssohn ; but who fell, educated and enlightened as he was, before the dreadful enemy. There was a perfect delineator we knew who might have filled our houses with exquisite life and beauty, and whom none excelled in what he undertook ; did you not once, with your own hands, Juridicus, fetch him from the very bar of a low tavern, where among the low he was of the lowest, and was he not untimely snatched away by the same enemy ? There was the young and once estimable genius who made Juridicus live again in inanimate marble ; did he not succumb to the same terrible foe of mankind ? There is that friend of

your own, Physicus, whom you declare to be the statesman of statesmen for the future, the man who in an age of political quackery stands out a master of political science ; was not he but a month ago a mere confused idiot at our own table, a poor buffoon who could only refrain from taking in his deadly foe when the foe had stricken him helpless ?

Juridicus. My dear Helena, I must interfere ; you are getting hypercritical.

Helena. I regret as much as you, Juridicus, the possibility of becoming so, and at the same time of holding by the side of truth. But these are painful experiences, which I am convinced are as nothing compared with those Physicus could narrate. They alone are sufficient to shake my confidence in the influences of education and enlightenment as the only means for checking the evil, rank and fatal, which we deplore.

Juridicus. I admit that such instances as Helena relates are most embarrassing and daunting, and we all could add similar. You can never go into any new neighborhood without finding some man of ability and energy for whom his friends make the apology that he is one of the ablest men alive when he is sober !

Helena. Why, is not that the case with the local doctor where we are ? Actually, Physicus, that man is by nature a Humboldt. He has collected all the geological specimens of any value for miles around. He is an excellent chemist and is informed in all that relates to natural things. He is so good-hearted, too, that the people almost worship him ; and yet, positively, he is so infatuated with drink that when our gardener cut his wrist in sharpening a scythe, and the blood was flowing from an artery, the clever doctor had to be fetched from the inn in the middle of the day, and literally staggered into the tool-house where the bleeding man was lying.

Juridicus. For all that, the clever man tied the artery

and dressed the wound so deftly that it healed straight-away and hardly left a scar. Moreover, you forget how the old nurse said that she, for her part, would rather have the doctor when he was drunk than when he was sober.

Helena. To dispense solution of strychnine in mistake for solution of quinine; and, but for the fortunate accident of recovery of the patient, after the most fearful tetanus, to get convicted for manslaughter.

Juridicus. Yes; but there he showed his skill once more; for if he produced the tetanus, he knew how to reduce the spasm until the effects of the poison passed away.

Helena. I am not for a moment arguing against the doctor's skill; I am merely adducing him as another example of the fact that education and enlightenment are no safeguards against intemperance.

Physicus. You could not have argued better; and you perceive that Juridicus himself is not able to controvert you on that point. His silences are admissions more eloquent than his speech.

Juridicus. I cannot allow that to pass. Helena has been fortunate in being able to discover food for argument from the history of a few exceptional men of talent and genius. We must not in such a matter as this, deal with exceptions. We must see the truth, in the past as well as the present, and through the many as well as the few. So much, I think, Physicus will allow.

Physicus. Willingly.

Juridicus. I was not prepared to hear you say willingly.

Physicus. It is nevertheless the fact. I believe that no better evidence could be found for the faith that is in us who proclaim the absolute necessity of total abstinence than the evidence of the past. It is but a sad repetition of what Helena, who for the time has been my hearty ally, has told to us. Her small experience among the edu-

cated is, alas ! the experience of all observers since strong drink came into the world. Noah was the most educated man of his day ; the greatest engineer ; the only man in the world who was worth saving in his time ; and yet, with all his education and enlightenment, Noah was not proof against drink. He was a great naturalist ; he knew every animal ; yet he fell lower than the lowest of animals, because he could not moderate his indulgence. If we come to history, the argument is on our side from the beginning.

Juridicus. I must give that passage of arms to your friend the Bishop, who accuses you of not knowing how to make bread, and of not seeing the resemblance of bread and beer as natural products—both coming from *bar*, corn—on which I may have a word to say at some future time. Returning to Noah : he, too, seems to me to be an exception. He is, to my mind, a fine figure in history, placed before us to show how the strength of a strong man may, by the exercise of his own passions, fall into abject weakness. Drunkenness in his case is shown up as a vice, and the argument scarcely touches the question before us, except as an ambush in which an opponent may be caught off his guard.

Helena. It seems to my poor comprehension that the story may be read both ways, as *Physicus* has read it, and as you read it, *Juridicus*. Under any mode of interpretation, it cannot but be accepted as a cogent argument against the use of intoxicating drink.

Physicus. I would not have introduced the history of Noah if it had stood alone in the life of the world. There are many other records left to us which can be accepted in no other sense than as similar morals and examples.

Helena. Most true ; and generally such records, even when they occur in mere legendary lore, have at their root some real event on which they rest. No sane man has lived who could invent out of nature. The best, the

wisest, the keenest, can do no more than re-create the created, and put into readable form, for all who come after them, what they have translated from nature.

Juridicus. That is well put; but we must not enter on subtle metaphysical questions which would lead us away from the subject proper. **Physicus** says that in the wide range of history we have evidence concurrent with it; and, if I understand him rightly, in all its pages, that wherever alcohol, as wine or other strong drink, has exerted an influence, that influence has been bad in its results, has led even the most advanced and educated men into bad courses, and has affected mind and body alike, to the evil of both. Is not that what I understand you to say, **Physicus**?

Physicus. You translate my meaning most correctly; and I believe there is abundant evidence for the support of it.

Helena. In point of fact, you banish altogether the idea of education as a controlling influence, and speak as though the evil acted independently.

Physicus. I do.

Juridicus. As though, like the rain from heaven, the evil fell on the good and on the bad alike?

Physicus. With this difference only, that it makes the good bad, and the bad worse.

Helena. And sometimes the good the equal of the worst.

Physicus. I fear that also is too true. I have seen the best made the worst by it; but, happily, on the whole, it is not quite so bad. A confirmed drunkard is not *invariably* a corrupt man, except in so far as the drunkenness lowers him in his own estimation and in that of his fellows.

Juridicus. A fair distinction; but let us again return to history. The point is, whether in all ages in which alcohol has played its part in affecting men, it has, as a rule, degraded men in their physical and in their moral natures. I want to put that special inquiry to the test.

Helena. It would be a long task to travel over all history to find an answer to that question. We should want your friend Sir Walter out of the Tower to get over that ground, Physicus, should we not?

Juridicus. The task is unnecessary. We may be quite content to select particular periods of history, and test by them. Suppose, for example, we selected Sir Walter Raleigh's own period. That surely was a time sufficiently brilliant, and noble, and useful, and learned. Yet wine, I take it, was used freely enough then, in all conscience.

Physicus. It was indeed a time of genius and learning, killed by the habit of indulgence in strong drink. "It was a short, a miserable, and a brilliant life," says a learned biographer, in speaking of one of the greatest men of that period. But there was no reason, save one, why that life was either miserable or short. I admit with you that the era of Queen Elizabeth was an era of all others distinguished for its men of ability and genius. It was also an era of short life, for which we have not to go far to find the cause. The time in England was one essentially of quiet and of comparative comfort. No devastating wars on English soil impoverished and embittered the people. The Queen reigned in the hearts of her subjects; and, despite her many inherited faults, she reigned with wisdom, and courage, and common sense. She encouraged all that was calculated to make her time memorable in learning, discovery, science. That active spirit of man which can never be compressed; that active spirit which in one age expands itself in war, in another in invention, in another in enterprise, and in another in mirth and song, or in some combinations of these, found in the age of Elizabeth scope for its development in enterprise, discovery, song, mirth, all combined. The mirth led to the free use of the at once maker and destroyer of mirth, strong drink. The giants intellectual—and it would not be straining a point to say

physical also, for their physical work was gigantic—fell, ere they had reached the zenith of their life, before this one and terrible destroyer.

Juridicus. Stay! stay! there were exceptions. What do you say of rare Ben Jonson, and of the Queen herself?

Physicus. I was about to admit, with all candor, that a few of the best of them, either by the exercise of more prudence than the rest, or by virtue of some constitutional facility to endure more, struggled through the *melée*, and, like the Queen, lived to see a ripe old age. But the majority? Alas! that passed through a life which was matured and ready to fall even at its prime. The greatest man of all who moved in that memorable age—the greatest man of all who ever lived in any age, as some think—this man, William Shakespeare, is in all his work a witness ever ready to declare and expose the ruling sin of his day and generation. It is true that he sometimes found a picture gallery among the drunkards, used them in his artistic way, and made them extol the virtues of the thing that lowered them to what they were, the buffoons of his creation; but in his heart of hearts, as he would himself express it, he abhorred the thing, while he could not resist the acknowledgment of its fascination.

Helena. Would you suppose that from his own practical experience Shakespeare knew anything of the spell of drink?

Juridicus. I cannot myself have any doubt on that point. You read the fact between the lines, whenever he touches on the subject of drink.

Physicus. It is too true. Line upon line he makes his characters know practically the bad effects of wine, and wish for emancipation.

Juridicus. I fear it must be admitted that the Poet led a merry life and a short one.

Helena. With a good many twinges, I fancy, of the

melancholy Jacques, a strong dash of Hamlet, and a pretty considerable burthen of Cassio. But pray, proceed, Physicus.

Physicus. Shakespeare may be taken as a type of his age; an age of education and indulgence; an age of meteoric life, short, sharp, and brilliant. A great age, undermined by one dangerous compound, and shortened by it, strong drink.

Juridicus. You pause, Physicus; not, I hope, with the idea that I am about to sum up. I would rather you gave us another picture.

Physicus. There is no difficulty in finding the picture, though there may be fault in the description. The picture is repeated in the reigns of Anne and the first Georges, in which reigns a stream of learning, rigid, profound, and solemn, was injured by indulgence in more infernal compounds than were known or used in the era of the Virgin Queen. The lighter wines, which quickly raised and as quickly dashed to the earth the lighter spirits of the Elizabethan day, were replaced by the fiercer and heavier drinks. Hogarth could now depict an alley of gin. Wits, statesmen, scholars could rollick over punch and scream over gout. But the general effect was the same. Steele resorts to strong drink to make himself a man, and sinks in sorrow. Addison stands up to win for himself a name, to add polish to the language which Spenser and Shakespeare created, to fill the country with wonder at English eloquence, and, in the midst of all, to fall to the earth ignobly self-killed, a martyr to alcoholic sensuality.

Juridicus. Too true, too true! But these men were wits as well as philosophers, and did not try to educate themselves on the question of strong drink. We may almost say they were unconscious of the evil, and, therefore, in that respect uneducated.

Physicus. Well, if this picture does not satisfy you in

the way of illustration, let me change it. A little later on in our historical survey there is before us, in the reign of the third George, another picture. At a famous club table sit six of the sovereign wits and scholars of the age; at the head of the board is the sage of England, the great scholar Samuel Johnson. Once more we see present the influence of the destroyer of the life, even of the most educated men. There is but one likely to escape, and that one the greatest in strength of mind and will, is the scholar who presides. Why of all the rest does he escape? Is he a proof specimen of the safety of moderation? Not a bit of it. He, educated man, has tried moderation, and it has sold him. His education cannot resist temptation, so he wisely discovers and adopts the only safeguard. Of all the men at that board Samuel Johnson alone is a total abstainer.

Juridicus. And, therefore, he alone escaped. Long live Physicus, who was always ready not only with an argument, but with the man as a witness. My friend, the bar was your profession. From father Noah to Samuel Johnson there is, indeed, subject matter for meditation. But see, there comes the postman,

“News from all nations lumb’ring at his back,”

as Cowper puts it. From him and death there is no escape. Let us attend to our rapacious calls, and then in a stroll on the heights prepare for luncheon and another contest.

Physicus. I shall require a refresher.

Helena. And you shall have it.

DIALOGUE III.

SUBJECT OF INFLUENCE OF EDUCATION CONTINUED—CORRECTIVE EFFECT OF EDUCATION MORE FULLY STATED—FALLACIES—ALCOHOL AS AN AGENT PRODUCING A NEW CONSTITUTION OF BODY AND MIND—THE EDUCATED NOT EXEMPT FROM THE INFLUENCE—MODERATION A FAILURE.

Juridicus. Perhaps you will find it too laborious, my dear Helena, to walk and think and talk at the same time. We have before us a steep ascent, and you might prefer that Physicus and myself climbed it alone, and discussed our subject with you at some future time.

Helena. Not at all. I should prefer to be your companion ; but, perhaps, for Physicus' sake, we had better climb the height before we recommence our argument.

Juridicus. I have no mercy for Physicus. He is like Cæsar, who could read, write, and dictate all at one time ; and now that he is strengthened by total abstinence, I am not sure whether he could not add another feat to his accomplishments.

Physicus. Your husband has not yet lost his taste for banter, I perceive, my good Helena. I did hope you had succeeded in curing him of that habit. As you have failed, I give him up as incorrigible.

Helena. Hopelessly. And, for the time, we had better save our powers to devote them to the ascent.—Well, we have mounted it at last, and now on this seat we have not only a resting place, but a reward for our labors in the view before us.

Physicus. It is very fine ; but what is this pile and ruin close at hand ?

Helena. No more at first sight than the ruin of what is called a closed mine. Yet from that mine, says the local tradition, the Phoenicians bore away the metallic treasures which were used for the adornment of the temple of Solomon.

Physicus. Juridicus smiles.

Helena. Juridicus smiles at every traditional story, and positively revels in enjoyment when he hears a hard-hearted scholar tear to tatters some of our choicest legends. We went one night last session to a learned society to hear Mr. Heywood read a paper which proved nothing more nor less than that there was never such a person as William Tell, never a Gessler, never a boy who had an apple shot from his head—never anything of the kind, in plain matter of fact.

Juridicus. And he proved his case up to the hilt. There was no escape from the facts he adduced. This, however, is not our subject, or I would go over the same ground to bring you to the same conclusion. You, Physicus, when we left off our conversation in the garden, had been making comparisons of the past as if they actually applied to the present, and had been arguing as if the work of educating the masses into temperance were a work distinct of itself.

Physicus. So, in a sense, I hold it to be. It must be a particular work of example as well as of precept, or it is all work in vain. It is, I grant you, a work that is included in the general scope and aim of education, but it is still a work to which special energy must be devoted, because it deals with a special and personal evil.

Juridicus. This is the point on which we differ. You, by your efforts, would interfere with a profitable industry, and would take from hundreds of thousands a source of

social enjoyment. I, on the other hand, would utilize the industry and the enjoyment to a good purpose. I would let the light of education make its way; let board schools flourish, and the result of their works have full swing. Then, without other effort for their assistance, men will naturally become the advocates of temperance through all the masses of society. One man will teach another the benefits of moderation; all will have their eyes open to the evils of intemperance from their own experiences; and men and women will learn to feel how much happier, how much healthier, how much wealthier they are under the rule of temperance than under any system of excess in what is taken as drink.

Helena. The advocates of the process of educational training into sobriety, without the aid of any special training, go, I think, a step further. They declare that, under the power and dominion of education the cause of the evil, which according even to their confession is fearfully ruinous, will admit of being retained in use with the whole evil extracted from it. They believe that the evil which, it is confessed, does to these still degenerate days, bite like a serpent and sting like an adder, will lose its sting and bite—will be enjoyed, and will never be abused. A man by his greater knowledge, that is to say, will know in the future when he has had just enough, and at that point he will stop. He is an educated man, and is as competent to determine what is good for himself and his own health, comfort, and morals, as any doctor of any Faculty of law, physic, or divinity. He is an educated man, and is therefore a law unto himself.

Physicus. I know of few arguments which are so potent as these arguments against the cause of total abstinence. They tell in a variety of injurious ways, and in none more than this one, that they hold up to ridicule all men who are earnest in reformation. It is a fine satire to tell a man

or a body of men to mind his or their business. It is one of those sayings which sound so practical, and it is very easy to say when every other argument fails. So it constantly happens that we who are teaching total abstinence are told to mind our own business. I notice, moreover, that these arguments in favor of reform solely through general educational processes serve another powerful end and object. They are easily applied so as to tickle the vanity of poor human nature. How grateful to tell a weak and wandering man that he is a law unto himself; that he knows what is best for himself; that he is not the fool which interfering folks who do not mind their own business would like to make him appear; that he can judge better than any one else what is most conducive to his comfort of mind and body; and that he has only to exercise the modicum of common sense with which every man is blessed, to avoid the source and danger of evil.

Juridicus. I would not on my part argue for education on those grounds in respect to this question, though some might. My view is that education re-casts men altogether and in that way reforms all their errors, as well as their single errors. That savage African whom a Livingstone might see living practically like an animal, feeding like one, unclothed, having a vocabulary of the meanest description; that savage, what deep gulf separated him from David Livingstone, socially and morally? Most surely the want of education. Educate that African, and you will change him altogether. Be he a cannibal, he will give up his favorite dish; be he naked, he will clothe himself in befitting and even elegant attire; be he all but an animal in matter of educational power, he will learn to read books, and, with the civilized man, will think on the most important readable subjects. In a word, educate him, and you have him your own way, as you like it. In the same manner, if you will but educate the masses, they will lose their

vices, not even excluding their vicious love of strong drink. They do not, in fact, love strong drink for itself, but, because they know no better, they take it and are injured. Give them the knowledge to know that they are injured, and the mere sense of self-preservation will teach them to avoid the danger. At the same time, let nothing lead you, as their teacher, to compromise their precious liberty in the use of the danger. Gunpowder is a dangerous thing in the hands of an uneducated man; but for that reason you would not withhold gunpowder from an educated man who knew how to use it, and who wanted to use it for the purpose of shooting game or blasting a mine. No; you would trust to the man; you would rely on his education, and you would not be deceived. Let the same rule apply to the use of alcohol. Educate the masses, and let them have alcohol at their free disposal to use as they, in their educated senses, shall see best for themselves and for their children. Trust education, in a word, and trust those whom you have educated, and then you abstainers may expend yourselves in empty talk. You are defeated, for the simple reason that all the dangers by and on which you trusted for illustration in defending your cause have died away under the milder and less rigid and more logical influence of general enlightenment and instruction in self-preservation, tinctured by the knowledge of the art of self-preservation.

Helena. Still the cause would remain; and you, Juridicus, have, after all, shown a mode of advancing which differs from that of Physicus merely in form. It is the same in spirit.

Physicus. You are most correct, Helena, in your remark; and the argument of Juridicus in favor of education, in the general sense of the term, as the one and all-sufficient cure for intemperance, would be perfect if intemperance were an evil that admitted of a cure. It so happens, how-

ever, that intemperance only admits of prevention. It is in fact, a disease, and is one of those diseases which, like cancer, never get well of themselves, and for which there is no cure. Happily, it differs from the terrible disease with which I have compared it, in that it is capable of being met by preventive measures, but by none other. Intemperance is unnatural to the healthy state of man, and whatever is of that kind is never curable in the presence of its cause with that cause in action. Take away the cause and you prevent, but cure you can not while giving the cause its full course. For this seems universally true in living phenomena, that the hurtful begets its like just as the useful does, and goes on increasing in the same way; so that the same train of effects springing from one cause is given to repeat itself with increasing force and intensity. Thus in time what was very simple and unimportant becomes at last complex and very important, many new and unexpected things being, as it were, engrafted on the original evil.

In respect to intemperance, these developments of progressing and progressive phenomena are of singular import. The action which the cause of intemperance sets up in the body of man, or in the body of an animal inferior to man, once set up, there is induced by it a series of changes which are not originally a part of the organic life of the man or of the animal. These changes being started, mark the commencement of a new life or form of life, which kindles a progressive tendency toward still further and more distinct changes, until a new organization of body and with that a new organization of mind, is constructed and brought forth. The body so changed stands apart from all else living that has not been similarly diverted from the position in which it was first placed, by the natural hand that produced it, to live after an ordained and fixed method, if it would pass through the ordained life that was assigned to it.

Helena. If I understand you correctly, you look upon a man who is fixedly under the influence of alcohol as a new organization; as something foreign to the original design altogether; and as capable of developing from that new and acquired form a new race.

Physicus. I mean that. And what is more, I maintain that with the new development of life there comes, naturally enough—seeing that evil may, as it were, take, for a time at least, what looks like a purely natural course—an idea of necessity, a sense of requirement for continuance, and thereby a sense of vehement requirement for the agent that causes the departure from the healthy and ordinary course of life. In fact, as it is in the nature of the healthy man to thirst for water, that the original construction and function of the body may be duly supplied, so it is in the nature of the unhealthy man, whose body and whose functions are transformed into new and aberrant types, to thirst for alcohol, that the alcoholic construction and function of the body may be duly supplied. We must and can not expect anything more or anything less. It is the unfortunate experience of all who know the life and the constitution of the habitual alcoholic, to become painfully and practically conversant with the fact that the craving I have noticed exists. I refer to it now, not to describe a phenomenon so well known, but to indicate how and why it is brought about, and how naturally it comes about when the conditions for its coming have once been laid and brought into activity.

Juridicus. Your mode of reasoning puts me in mind of Bishop Stilwell's monk's song, which you, you rogue of a Physicus, used to sing with no little gusto in College days. What think you, Helena, of our friend here, whom you admire so much, singing such a sentiment as this:

“ Tho' I go bare, I do not care,
I nothing am a-cold ;

I am so wrapped and thoroughly lapt
In jolly brown ale and old."

Helena. I think I should like to hear him sing it again.

Physicus. My singing days are passed; but *apropos* to our subject, I can tell you a very good story instead. A learned friend of mine, who was for a time Consul in Japan, relates the story, and it explains, in a most true and direct manner, the case I have put forward. My friend knew, when he was abroad, an American who was full of native wit of the far West type, and who was also, like our friend the monk, too often full of good drink to be, what he ought to have been, a healthy man. My friend thereupon ventured, as a member of the profession of medicine, to expostulate with the Far-Wester, and to inquire of him how so clever a man could so far forget himself as to drown his intellectual force and destroy his body by the use of alcohol as a drink. "Stranger," replied the drinker, "hospitality prompts me; when I betake myself to whisky, I soon become quite another man, and then I feel it is but fair to treat that other man."

Juridicus. There are many who will merely see a clever joke conveyed in that repartee, and I confess it is a very clever joke. There can be no doubt on that score; and, as you say, it fits in well, considering that alcohol is the theme of our discourse.

Helena. It was really fine wit.

Physicus. It was sparkling; but I care less for the wit than for the serious moral which lies beneath the wit. The man was correct in what he said, to fullest extent of what he said. When he took the whisky, it did soon make him another man; and when he took more, he did take more in order to treat that other man. The whisky withheld from that man's organism, he inclined, after a time, to the position of the healthy man, from which he originally started when he became a drinker. For the moment he,

to some extent, lost the alcoholic constitution which he had engendered; and if he could then have withheld altogether—in other words, if he could have abstained—he would have re-established the original and healthy constitution. Unable, as he thought, to abstain, he straightway proceeded, through the whisky, to re-establish the alcoholic man; and, having set that man up, he proceeded to treat him, until he raised another and a worse kind of man, Perchance, in due course of training, he may succeed still further.

Helena. So that he may become possessed, like the man in the parable, of seven devils, each worse than the first that afflicted him, and each appearing in form and function by and through his own diseased corporeal and mental organization.

Physicus. Truly so; and those who argue for the cure of intemperance by education, would say of this man, whose wit has so much instructed us, that he was an uneducated man; and that if he had been properly instructed he would never have gone to the extent of creating within himself another man who desired to be treated, and whom the second man thought it would be unfair not to treat. Whether the man who divided so easily into three men were or were not an educated man, I do not venture to state, for I am not informed. He was, at all events, a civilized man; he had at times his wits about him; he was not destitute of the faculty of observation; and, in the ordinary meaning of the word, he need not have been other than an educated man. In any case his education would not affect the position I should be forced to take concerning him, namely, that the most refined kind of general education would not have cured the man from constructing his second and third self, so long as the cause which led to these constructions was used by his first self for constructing his second and third.

Helena. Your position would be that the first error would produce the idea of necessity for the strong drink, and that nothing could be of the least avail in checking the new development save and except the system of prevention, the removal of the cause of all the developments, the strong drink, which was the father of them all.

Physicus. Yes. I contend that drinkers of alcohol are always becoming other men, men within men. They vary from their healthy state very little at first, it may be ; but they always vary a little, however careful, and however firm and resolute they are. They are fortunate if they only vary so much as to exaggerate, in their words and deeds, their own inherent faults and vices, without becoming infected the more readily with the faults and vices of those with whom they come in contact, and who are not commendable companions. The many who minister to their second selves, in the variations of life they induce by alcohol, soon make two perfectly new men, who are troublesome and capricious, and whom nothing in the way of education modifies. In plain truth, the education which has been received, if held in connection with the cause of the development of the new phenomena of life, ministers to the man in the one state as in the other. The hard drinker, who may present half a dozen phases of mankind in his own unhappy person, may be educated while enduring every one of these stages, and still be not a whit better on that account. He may, in a certain half-helpless and wholly capricious manner, be adding to his education at the time when he is most determinately changing his moods and corporeal conditions ; and he may, as I know from the admissions of the most educated men, be employing his educated skill in deceiving himself, and in hastening to its end his own life.

Juridicus. You physicians have at command the means of learning facts on these subjects which belong to no other class of the community, and on this point, therefore, your

experience and knowledge would influence me much. We lawyers have also to study human character, but only from the outside, and at a distance from it. You physicians study it in its very recesses. You trace the moral out of the physical nature, and so have every advantage over us. Pray, do not hesitate to enlighten us more fully on the matter now before us.

Physicus. Were I forced to tell the whole truth on the subject as it is written in nature according to my observation; were I forced to prove from the evidence that has been placed before me on many and many an occasion, and from the confessions that have been made to me by the educated as to the influence of alcohol on their lives and reasonings and acts, I should bring forward such a book of confessions as would startle the world by the sorrow, the passion, the misery, the despair it would unfold. I am not forced to this painful task, and I could not carry it out, voluntarily, for obvious reasons. I may, nevertheless, state clearly enough what the lesson of such a task would teach. It would teach that education in itself is no safeguard whatever against the influence of alcohol in changing the man, in making one man another and yet another man, when once the alcohol has fairly commenced to produce the alcoholic organism. It would teach, I lament to say, that education is often the sophistical leader to further evil after the alcohol has commenced to play its awfully transforming mission.

Helena. At the same time, in the midst of so much that is disheartening, is there really no sign that young men and women are, by education, becoming firmer in their resolves not to be led away?

Juridicus. If what Physicus teaches is correct, that were logically impossible. You see he puts education aside as a direct reforming influence altogether. He insists that so long as the producing agent of evil is at work, so long its

results will be seen. He is dealing with processes of growth.

Physicus. The truth lies as you have so clearly put it, Juridicus. Assuredly there is no more evidence in the present than there has ever been in a previous time that alcohol, when it has once laid hold of a man or woman, has lost its hold by the counteracting influence of education. To me, in the course of a year, numbers of educated persons come who, under the bondage of alcohol, ask what they shall do to escape from the killing thralldom. In days when I was myself inclined to compromise ; in days when I believed in the power of education ; in days when I thought that what is called a fanatical crusade against alcohol might possibly be injurious rather than useful to the good cause of temperance ; in days when I was ignorant of the physiological law that whatever sets up in the body a new form of organization which, independently of all influences of reason and knowledge, goes on destroying so long as the cause of it is permitted access into the body ; in those days of compromise and doubt, I gave full swing to the practice of recommending and carefully prescribing moderation to all who came to me for counsel and advice.

Helena. I remember that phase of your career very well indeed.

Physicus. To carry out these efforts in a systematic and scientific manner, I used my best endeavors to regulate the quantity of alcohol that should be taken under special conditions. I estimated the quantity of alcohol that was contained in different specimens of wines, ales, stouts, spirits ; and, allowing a fair margin for sources of error, I constructed a table which showed to me at a glance the spirit-value of each alcoholic drink that could be particularly recommended for any particular case. Not content with the ordinary wines, I added the Greek wines to my list ; and, in short, prepared myself for every possible emergency as

far as I could foresee. I carried out this plan for five years, and I can fairly say that all I gained by it of any practical service whatsoever was *nil*.

Juridicus. Nay; you gained credit that, as a physician, you were not fanatical in respect to the use of alcohol either one way or the other; that you did not give it in excess in any case, and that you did not unduly withhold it when it was really necessary.

Physicus. The *credit* might be very consoling, and to some minds, perhaps, might be all-sufficient; but unfortunately the practice was most lamentable. As a result it was a complete and miserable breakdown. I never cured one single intemperate person by means of it; it is very doubtful if I ever relieved any. It is not doubtful that I kept some from the application of the one and only remedy that could have saved them.

DIALOGUE IV.

TOTAL ABSTINENCE IN SOCIAL LIFE—SOLUTION OF SOCIAL DIFFICULTIES—RESULTS OF PRODIGAL MIRTH—RESULTS OF EARLY TRAINING IN THE USE OF WINE—A CASE IN POINT—A WISE QUOTATION.

Helena. We were conversing yesterday, during our stroll, on the compromises which some make in respect to the use of wine or other strong drinks. You, Physicus, then held out for no surrender of total abstinence.

Juridicus. And I admired much the courageous way in which you defended your position. At the same time, I can but think that in practice you must find the position all but untenable.

Physicus. Do you mean socially, or in the practice of my profession?

Juridicus. I mean in both respects.

Physicus. It does not surprise me that you should hold that view, for I held it myself a long time, and, in all candor, it stood in my way, as a reformer, for several years. The fear was a bugbear, and, like all false conceptions, glided away as soon as I walked up to it.

Helena. But at table now, among strangers, what do you do? With us and those who know you as intimately as we do, it is of course easy enough, for we respect your convictions, and should feel it to be an actual rudeness to press on you what you would not wish to take. But you go largely into public life, and have, in addition to an extensive private circle of friends, a large circle of acquaint-

ances whom you visit occasionally. It is an imposed part of the life of Juridicus that he shall not move largely in general society, and he, therefore, might get off easily from the importunities of the visiting world. I hardly see how you can manage it.

Juridicus. What about your public dinners, too? If I mistake not, you are a member of the mystic craft of Freemasonry, and sometimes pass from labor to refreshment in that laborious avocation.

Helena. I should like to see the labor.

Juridicus. I would rather see the refreshment, which is, I expect, by far the most sensible part of the business, though it puzzles me how it can be got through without wine. Then there are your dinners at learned societies, with, in your case, Physicus, the functions of chairman sometimes superadded. Is it all possible *sine vino*—without so much as a taste of the loving cup?

Physicus. It is not only all possible, but all easy to the positive abstainer. That was the truth I had to learn. No moderate man can learn that practice. He resolves and resolves, and simply does it not.

Juridicus.—

“Resolves and re-resolves, and dies the same.”

Physicus. Too often; and the next lines of your favorite poet chime in well—

“And why? because he thinks himself immortal!
All men think all men mortal but themselves.”

To which Young might have added, drinkers especially; for of all men I know, none so severely criticise other men, who injure themselves by drink, as your hard drinkers.

Helena. It is most true, I would say absurdly true. We had two friends, each one of whom, when he became sentimental from drink, invariably began to pity the other for his imprudence. Both died young men, comparatively,

under fifty certainly, and in the same year, from excess. But please proceed to show us the way to avoid wine in all society without giving or taking offence.

Physicus. It is easier to avoid giving than taking offence, but both avoidances are easy enough. You have but to say on all occasions, firmly and kindly, "I do not take wine or any other form of stimulant," and your difficulty is over.

Helena. But surely some press it on you, and almost make you take it, as if it were a discourtesy not to press it?

Physicus. None who are well bred; while those who are ill-bred are always beaten by firmness and polite refusal.

Helena. There are, however, sometimes many gentlemen together who are of one mind, in favor of wine; then, I should think, the difficulty is increased.

Physicus. Not if you are firm and courteous. Indeed, I am glad to say that, even in the case of gentlemen who are with gentlemen, the custom of badinage against an abstainer is fast going out of fashion. It is only men of naturally vulgar minds who commit themselves to rail at those who abstain, or who offer absurd comments on them.

Juridicus. I agree with you in that, **Physicus**, entirely, and I would go even further than you do. I am quite sure that the presence at table of a total abstainer moderates immensely the quantity of wine that is taken. A well-known man at the bar, who in his day has been more famous in his college-hall than in his court, and who, I am sorry to say, is paying the forfeit for his eminence, has made a calculation that at a dinner party of twelve one staunch and well known teetotaller reduces the wine-drinkers to five and a half.

Physicus. That is to say, the eleven, who are not abstainers, only take half the wine which they would take if the twelfth, who is an abstainer, were not present.

Juridicus. Exactly; and, therefore, the sly old fox now

never gives a dinner without entertaining one abstainer at least—two if he can get them. It is a wonderful saving in the course of the year.

Helena. It is quite curious to see how many persons under the circumstances named, appear actually nervous at being seen to take wine. They take it privately, as if they were detected in the act of doing something wrong.

Physicus. The time will come when they will carry that much further. There will be a phase in the social life when wine drinking will be considered a vulgar habit, as drunkenness is now. Then wine will lose its place.

Juridicus. "Oh, that mine enemy would write a book!" There is the admitted influence of education right out.

Helena. I am afraid the legal mind, ever on the watch, has caught you napping at last, Physicus.

Physicus. No, lady, not at all. It will be the multiplication of total abstainers that will bring about what Juridicus would attribute to the influence of education. It will be the effect of the example. It is a rule-of-three sum. If one total abstainer can reduce eleven wine bibbers to five and a half, what reduction would three total abstainers make in the same number of wine-bibbers?

Helena. An excellent rejoinder. I fear, truly, if wine were present, and all were wine-drinkers, education would indeed have but little influence.

Juridicus. I grant you a rule *nisi*, and the publication of your book may proceed without prejudice.

Physicus. The book shall go on. Meantime let me finish what I had to say about the social obstacles. I have really no difficulty whatever in any society, not even in the Masonic Society, in acting as a total abstainer. It is simply without ostentation to declare yourself, and the thing is done. In fact, I could, if it were compatible with the work of my life, enjoy far more the pleasures of society than I ever did, since I am never upset by what is called the

"seediness" that follows the enjoyment of wine, and the exhaustion of mind which that dreadful enjoyment brings.

Juridicus. And do you really think that the mirth, and what is called the jollity of the table, is not lessened in some degree by the omission of the stimulant? Is it not less of a feast when there is no wine?

Physicus. If by mirth and hilarity you mean that supersensuous pleasure which leads to the reckless and fleeting joy Epicurus is falsely said to have taught his disciples; if you refer to that pretended happiness which cries out, "Let us eat and drink, for to-morrow we die"; if you refer to such kind of happiness as our grandfathers sang when they indulged in their wild choruses:

" So 'tis with us, my jovial friends,
Let friendship reign while here we stay;
Let's crown with joy our flowing bowls;
When Jove commands we must obey ;"

if, I say, you mean such prodigal mirth as that, then I admit that the total abstainer knows it not. But is that kind of mirth happiness?

Helena. I see none in it, and never could; but that is perhaps, because, as a woman, I have never shared in it.

Physicus. If you ever had shared in it, depend on it, you would not have led the happy life you have so far known. I have never seen that kind of forced pleasure end in aught but a short and feverish, or a lingering and miserable life. Juridicus will, I am sure, bear me out on this point with his usual candor. We are both men of middle age, and we both, in our school and college, which happily we shared together, had a host of fellow-students and companions, among whom were not a few of the roystering sort. Let him tell where the roysterers are now, and what was the result of their lives?

Juridicus. It surely would be a sad story if it were all told. We both know the life history of numbers of these;

you, Physicus, professionally in many cases, and I in a few. Once I had to defend one of the unfortunates, and with no avail, in fact, in a defence against hope. And one, alas! alas! I had actually to pass judgment on one of them. I thought my heart would break.

Helena. It made him, strong man as he is, sick at heart and sad for months. On one terrible day we should have consulted you had you been in town.

Physicus. I know the case to which you refer; but I was not aware until now that you, Juridicus, knew the prisoner under the new name and calling he had assumed. I had hoped you were saved that pang at least.

Juridicus. The moment the unfortunate wretch stood in the dock I recognized him, and he me. The choke with which he pleaded "Not guilty," and on which so much public comment was made, was caused by that recognition. All my early life filled my soul in one glimmer at that awful moment. The beautiful boy, with a face like that which is given us of Milton in his boyhood, meeting me in his black velvet dress, on his beautiful little white pony, when I went to visit him in school holidays; the bay pony which he led for me to ride from the coach to his father's house; our gallop over the fields to his happy home; the greeting of his hearty merry-eyed father, and the affectionate embrace of that lovely woman, his mother; the first words, "so this is your friend, the judge, Charlie; I hope he won't be very severe upon us," from her sweet lips that had just kissed mine; the childish joke of the boy, "Where shall you buy your wigs, old fellow;" and the joyous laugh of both the parents as their eyes beamed on their only child—all this scene, I assure you, came upon me with a vividness and shock that made me cold from head to foot. I drew my robe closer round me for very warmth's sake, as I heard that same voice now choke out "Not guilty;" and, horror of horrors! felt it guilty by the way it spoke.

Physicus. And guilty surely enough it was; but the fault was not altogether its own. The prime fault there was misdirected love. The jolly father of that poor boy, too fond himself of rich old Port and choice Madeira, treated his beloved son to his own delights, so that almost from the time he left his mother's breast he acquired the taste for wine. The poor mother, when she thought him weak or low, had ever at hand the one restorer. Ten years after he had left school his father had died of dropsy from the restorer; his mother, in whose family there was a taint of insanity, had fallen into mere weakness of intellect, in which, with still admiring fondness, she followed her boy from one mad speculation to another, to his final ruin. On that she closed her eyes forever.

Helena. A happy termination.

Physicus. A most happy termination, and one which I hoped would sober even the wretched son, for whom there were still many fair openings for a new life. But by this time he was one of the great family that is sold to alcohol, and in his false friend he courted his only enemy. He came to my house one night asking veritably "what he should do to be saved." I counseled him, urged him to be moderate, to take care he took no more wine or spirit than was good for him. Then, with strange inconsistency, I asked him to come up-stairs and discuss old times over a bottle of light champagne. I could see that he despised the trash, though it was the finest that could be bought; and soon he went his way. From that day forward I heard no more of him until his solicitors wrote to me, submitting the scientific facts of his awful case, and asking me if I could suggest any saving line of defence for instruction of counsel, even if I could not come into the witness-box to give evidence on his behalf.

Helena. It would be hard to find a more striking example of the bad effect of teaching the young to take

strong drink. But do you really suppose that when he came to you, to ask you, as you express it, "what he should do to be saved," do you think that if then you had insisted on his adoption of total abstinence, he would have followed your advice, and would have been saved? It is almost too much to hope for in such a confirmed case.

Physicus. If I could then have met him as I could now; if I could have said to him that there was but one remedy; if I could have pointed to my own example as well as precept, and said, "see how well I progress mentally, physically, socially, without indulging in this hurtful drink," I think I might have saved him. He was, as boy and man, of the most gentle disposition at heart, but was easily led, and fell into goodness as readily as into vice. Since I have seen the light I have saved some who, like our poor friend, might, but for the effort, have come under the hand of the law, and in like manner under its condemnation.

Helena. At least, you would have given him a chance which he never had.

Physicus. I blame myself for my blindness, my long-continued blindness, more, I assure you, than I can tell you.

Juridicus. My good Physicus, blame not yourself for what has been an all but universal blindness. Be thankful rather that the scales have fallen from your eyes while so many hundreds of thousands still carry them. Let this also be your reward, gleaned even from the bitterness of the experience we have discussed, that though your words may never really convert a sluggard like myself to total abstinence in all its purity, never more shall a child of mine be tempted to drink at my table, if Helena will support me in the resolution.

Physicus. I will pledge myself for Helena, if I am not greatly in error in reading character.

Helena. You may most safely; and to my mind there

has come a relief in the resolve which I have not felt before since I was a mother. At last I see clearly my solemn duty.

Physicus. Whereupon we cannot do better than change the topic of our discourse. Juridicus is, I see, keenly touched by the narrative we have recalled, and I were better employed than in dwelling upon it.

Helena. It will do no good to dwell upon it. "In this mixed state," as a favorite author of mine says, "in this mixed state there are inevitable evils, and all that a just man can do is not to deserve the position that may be his lot."

Juridicus. A wise sentiment, my Helena; and who this time is your favorite and my rival?

Helena. Guess.

Physicus. Samuel Johnson?

Juridicus. Lord Bacon?

Helena. Both wrong. It is Marmontel, in his beautiful story of Belisarius.

Physicus. I move that we adjourn, and, after some music, that we listen to a little more of Marmontel.

Helena. With all my heart.

DIALOGUE V.

WINE-TASTING FALLACIES—DELUSIONS RESPECTING WINES—DECEPTIVE STRONG DRINKS—POISONOUS ACTION OF FUSEL OIL OR AMYLIC ALCOHOL—PROPERTIES OF AMYLIC ALCOHOL—GREEK WINES—BAD EFFECTS OF PURE ALCOHOL ON HEALTH AND LIFE.

Juridicus. It seems strange to me, my old friend, to be taking dessert, and not to have the pleasure of asking your opinion of my wine store. Once on a time I should have had on the table a specimen of every choice wine I could afford for your delectation and opinion.

Helena. You had the credit of being a connoisseur in those days.

Physicus. I believe so ; but the days are past, and I do not regret the loss of what at the best is a very foolish and delusive accomplishment.

Juridicus. But surely there is an art in forming an opinion respecting wine, whether it be fine or indifferent ?

Helena. Or whether it be wholesome or hurtful ?

Physicus. I think there is more of pretence than of reality in any such opinions.

Helena. Then the well-known picture of the three wine-tasters with their cheeks blown out does not impress you as a picture of men singularly wise.

Physicus. Indeed it does not ; but I have seen the picture in actual life. I once paid a day's visit to the London wine docks, and there I saw the picture repeated five or six times. It is a picture of individual taste dictating to individual stupidity.

Juridicus. You are hard there, and not, I fancy, so fair

as you would like to be. Some men, I am sure, have a refined taste for good wine. I am quite satisfied you yourself once had a very refined taste.

Physicus. I am equally satisfied that there was never anything on which I was more deceived myself, and therefore ready, with the most perfect good faith, to deceive others. In fact, at the time you name, I had no conception of the extensive frauds that are practiced in the production of wines, and other alcoholic drinks for the table.

Juridicus. Would you call such manufacture really a fraud? Is it not the fact that the wine and spirit merchant simply caters for the pleasure of his customers? His customers, knowing nothing about wines and spirits in their purity, prefer certain wines and spirits which are not pure, but which accord with their acquired tastes. The merchant, aware of this taste, call it a depraved taste if you will, ministers to it. If he did not minister to it, he might as well shut up his office. I cannot, therefore, in the strict sense of the word, call his proceedings fraudulent, seeing that he makes no disguise of them, and no statement that he is selling the natural thing.

Helena. You mean to say that he must not be too severely criticised for only selling that which is salable?

Juridicus. Precisely. When our wine merchant last called, I had the matter out with him, and he was honest enough. He admitted that the champagne districts of the whole world would not supply London alone for one month, each year, with natural champagne produced during the year. He made no secret that the wine called sherry is fortified by the addition of alcohol to twenty-three and even twenty-five per cent., and that genuine port was now a rarity. He declared, with all candor, that if he sent out those wines containing their precise natural complement of ethylic alcohol, no one would buy them. They would, he said, be considered "flat, stale, and unprofitable."

Physicus. And you consider that man was driving an honest trade ?

Juridicus. Honest, as the world goes. An acknowledged dishonesty which the law cannot reach, and which the world countenances.

Physicus. I have never heard a stronger argument from any one in favor of total abstinence from all alcoholic drinks. I am willing to withdraw the accusation of fraud from the wine-seller, when such an illustration of universal self-deception is offered by you.

Juridicus. In what way does my argument touch the question of abstinence ? I was merely touching on the public taste.

Helena. Physicus means that if the public taste is so perverted that it buys for drink one thing which it mistakes altogether for another thing, the sooner its taste is reformed the better.

Physicus. That is well put ; and the further you look into this matter of sale of false drinks, or of drinks under false names, the more you will see the necessity for the entire reformation.

Helena. I believe that the ignorance of the masses of the public on this matter is extreme.

Physicus. It is beyond belief. I will not insult you by saying you have not a genuine wine on your table, and I could not do better for converting you to my views than by inviting you to have a skilled and honest report on each specimen.

Juridicus. Oh, pray understand me. I do not dispute that there is much truth in what you say ; but however it may be, it does not affect the question of mere buying and selling. The whole body of the drinking public is at fault, not merely the wine-seller ; that is my argument.

Physicus. So let it be. But tell me, were you never deceived respecting wine, even by a connoisseur ?

Juridicus. I have been, certainly. I was dining with a noted city company last season, and one of my friends—a connoisseur of connoisseurs—passed to me a peculiar hock, which he warranted. It was a wine that in the glass looked like crystal, and that drank like thin honey, with an aroma I shall never forget. Our praise of that wine was, I fear, unstinted, and the connoisseur was, if there could be such a person, a happy man. The penalty! that, too, I shall not easily forget. What was in the wine I cannot say, but the taste of it remained with me for hours, and when I got home I was completely *hors de combat*; cold, sleepless, nauseated, and trembling. The whole night was passed in extreme misery; and soon, to the symptoms of coldness and prostration, there was added a racking headache, and at times an actual delirium. When I slept I started, and the merest touch threw me into a tremor. The next day I was unable to do anything; and I may safely say that for a week I was suffering, more or less. It was the first time I ever vowed I would never touch wine again.

Physicus. And you did not keep your vow after all.

Juridicus. I did not, because the practitioner who attended me explained very sensibly that it was not from the effect of good wine that I suffered, but of some foreign alcohol which was in that particular specimen we had so praised, and which was, in fact, a poisonous fluid.

Helena. You will know it, Physicus; for the doctor, to whom Juridicus refers, quoted you as the authority who had first experimentally demonstrated the action of this poisonous spirit on the body.

Physicus. I know the traitor. It was amylic alcohol.

Helena. That was not quite the name; it was not so scientific as that.

Physicus. Then it was fusel oil?

Helena. It was fusel oil—potato spirit.

Physicus. All the terms are correct, and apply to the

same thing. Fusel oil, the crude spirit got from the distillation of potatoes, and therefore called potato spirit, is impure amylic alcohol.

Helena. How is it purified?

Physicus. By distillation several times repeated.

Juridicus. And why do you call it alcohol? I always understood that spirit of wine was alcohol.

Physicus. So it is, but it is called *ethylic* alcohol. The amylic alcohol got from starch (*amylum*), by fermentation is constructed on the same chemical plan as ethylic alcohol, but is possessed of different physical properties. It is heavier, has a most peculiar penetrating odor, and is practically insoluble.

Juridicus. I shall never forget its odor.

Helena. Nor its effects.

Physicus. I dare say not. I was present one night at a friendly *reunion*, where one of the company, who had that day returned from Hamburg, produced a flask of fine Skiddam, which he very much prized as a novelty. He handed the flask to me to notice the peculiar smell of the liquid; whereupon I detected the enemy easily enough, and made a very simple and effective demonstration of its presence.

Helena. How did you do that?

Physicus. Amylic alcohol contains more carbon than pure wine spirit does. Pure wine spirit, ethylic alcohol, contains two atomic parts of carbon, six of hydrogen, and one of oxygen. Amylic alcohol contains five atomic parts of carbon, twelve of hydrogen, and one of oxygen. So it is a heavier body. Do you follow me?

Helena. Perfectly, so far.

Physicus. When you saturate a piece of common cotton wool with pure spirit of wine or ethylic alcohol, and set fire to it, it burns.

Helena. As in the spirit lamp.

Physicus. As in the spirit lamp; and it burns clean. It

gives no soot. If over the flame you hold a white plate, the plate is not even tinged by smoke, if the spirit be pure.

Helena. It is so. The spirit lamp does not blacken. Why does it not ?

Physicus. Because, in the process of combustion, all the carbon of the spirit is consumed or burned.

Helena. Destroyed.

Physicus. No, not destroyed, but transformed. Nothing is ever destroyed in chemical processes. The carbon has all combined, in the process of combustion, with oxygen derived from the air, and a gas composed of it and oxygen, in combination, has been produced. The gas is colorless, fixed in composition, and causes no stain on the whitest surface.

Juridicus. The same gas is given off by the breath.

Physicus. Yes. It is what is commonly called carbonic acid gas, though modern chemists have refined on the name of late. For our purpose we may retain the old name.

Helena. And in the combustion of alcohol of wine, the whole of the carbon is made to enter into combination with oxygen.

Physicus. All of it. But when you burn amylic alcohol in a similar manner, on wick or cotton wool, you get another result. If now you hold a white plate over the flame, the surface of the plate is almost immediately coated with soot, because the combustion is not complete. The fluid that burns is decomposed, but it yields in the decomposition more carbon than can, under the circumstances, combine with the oxygen contained in the air. There is liberated, consequently, fine carbon, in addition to the production of carbonic acid.

Helena. That is, indeed, a very simple test ; and did it answer in the case of the Skiddam ?

Physicus. Perfectly ; and I warned my friends solemnly

not to drink a fluid so dangerous. My warning was, however, only laughed at on that merry occasion.

Juridicus. And cried over, I warrant, in the morning. I can pity the sufferers.

Physicus. Not without cause, I assure you. I have never seen worse examples of amylic alcoholic poisoning than occurred in two of my companions, who had the largest share of the Skiddam. They both had what is called *delirium tremens*.

Juridicus. I believe you consider that *delirium tremens* is always produced by amylic alcohol.

Physicus. That is the practical outcome of my experimental work on the subject, and ordinary experience is every day bearing it out. In Sweden and Norway, where *delirium tremens* is of the most common occurrence, it has recently been found that amylic alcohol is present in almost all the spirituous drinks that are taken, and a project of law is now on hand for excluding it.

Juridicus. How does it get mixed with the pure wine spirit in drinks of alcoholic character? Is it intentionally added, or is it an accidental introduction?

Physicus. It may be both; though, as a rule, I believe, it is a product of imperfect distillation. In Sweden and Norway this is certainly the case, and in England it is often the same. In some instances, however, the amylic spirit is added to produce a variety rather than to cheat the purchaser; to gratify a special taste, and create a novelty on which learned connoisseurs in wines may expatiate at city dinners.

Juridicus. That is a *quid pro quo* for my criticism on fraud. Well, it is true. On the occasion I name, the cunning knaves did defraud me of many hours of health, and many days of happiness.

Physicus. The heavy alcohols produce great mental depression. They interfere with the work of secretion in the

body, and particularly favor what, in the absence of a better term, is called biliousness, an expressive term but not a very correct one, seeing that when a person is bilious he is often not producing sufficient bile.

Juridicus. My depression extended even beyond that, though that was bad enough. I confess I was not a little chafed and vexed to feel what a fool I had been made of, and that I, who ought to be an example to every one, should have fallen into such debasement.

Helena. The accusation is too harsh against yourself. You are not more than mortal, and on the occasion you name you were fairly entrapped. No one can be ever on guard, and to be on guard among friends would be a tax on life not to be endured. Physicus could not guard against an accident of that kind.

Physicus. Ten years ago, madam, I should have been entrapped in precisely a similar manner. I should escape now because I eschew the danger altogether. The connoisseurs have lost their hold on me. Charm they never so wisely, I am not to be charmed.

Helena. And I am sure you are wisest in the course you pursue.

Juridicus. What seems to me to be a better policy is prudence. Now I know amylic alcohol, I shall be on my guard against it, and shall keep to wines that I can trust. And, as I never take spirits, I shall be, henceforward, tolerably safe.

Helena. I have been told that the Greek wines are so singularly pure and wholesome. They are foreign to my taste, but in the glass they look enticing, the red varieties especially.

Juridicus. I have tried most of them, but can detect no difference in effect between them and other wines, while some of them were positively execrable. Is it true, Physicus, that they have special virtues; that they do not intoxi-

cate like other wines; and, that they have tonic-giving qualities?

Physicus. Not at all true. I knew well a man who devoted his life to the work of introducing the Greek wines into this country. Lord Byron was not more devoted to the liberties of Greece than this man was to its wines. To prove them, I tasted and tested the wines, and the most favorable report I could make in respect to them was, that they were free of adulteration. They were, I believe, fairly natural wines, the strongest of them containing not more than sixteen per cent. of alcohol by volume, while some did not contain more than nine or ten per cent. In taking them you had, therefore, some surety that you were not drinking more than sixteen per cent of alcohol; and that is all I can really say in their favor.

Helena. The same might also be said, I presume, of the French wines.

Physicus. It might, and of the Hungarian, Italian and Rhine wines also. In plain terms, putting aside the question of adulteration, the safety of a wine, and the harmlessness of it, is in precise proportion to the smallness of the amount of alcohol which it contains.

Juridicus. A man who knows what he is about may, therefore, take a free amount of wine, and escape the effects of the indulgence, after all, with comparative impunity.

Physicus. If two men drank a bottle and a half of wine at dinner, which is, I observe, a fair average quantity among professed wine-bibbers, and one kept to *vin ordinaire*, or light champagne, or Greek Visanto, or Castle hock; and, if the other took old port, Oxford sherry, or Madeira, the first would take practically half the quantity of alcohol that was taken by the second. The first would take less than four ounces of alcohol; the second over seven ounces.

Helena. And that would lead to great differences of effect.

Physicus. To notable differences. The first would be intensely exhilarated at the time, and afterwards somewhat depressed. The second would be speedily depressed, and brought just to the verge of danger. The heart of the first would be set working at the rate of five hundred extra strokes per hour above the natural; the heart of the second at the rate of a thousand extra strokes per hour. The one would be like a man walking fast, the other like a man running fast.

Juridicus. And how would a man who had taken no wine compare with them? I mean, how would he be situated while they are considered as walking and running?

Physicus. He would be as one lying down in repose.

Helena. The god of wine can hardly, I think, be obliged to you, Physicus, for your attention to his designs in this world. You make even Juridicus look gravely at that favorite Madeira, which I certainly could not touch, but which he seems to enjoy.

Physicus. The wine god need have no fear of me, if he is a benefactor to the world. I have really no prejudices, and would rather, if I could, join Juridicus in finishing his choice Madeira, than pain him by leaving the bottle half full. But facts are stubborn things, and I see no reason whatever why I should run out my life when I can rest it out. It is already too short by one-half for all I would like to do in my day and generation, a reason alone sufficient to impel me to abstinence.

Juridicus. And a sound reason. There are, nevertheless, two sides to the wine question, even on the grounds you name; and I shall be glad when we have rested from this present discussion to look at the other side of the shield under your criticism.

Helena. Then I propose now that we move to the drawing-room, and partake of the drink which cheers but not inebriates, a cup of tea.

DIALOGUE VI.

REVIVAL OF THE "NIGHT-CAP" QUESTION—NIGHT-CAP FATALITY—EFFECTS OF MODERATE INDULGENCE—A CASE IN POINT—DOUBLE DANGERS FROM INSIDIOUS ACTION OF ALCOHOL—EXCEPTIONAL LONG-LIVED DRINKERS—ANOTHER CASE IN POINT—REASONS FOR EXCEPTIONAL EXAMPLES.

Physicus. In the days of our student life, Juridicus, we should at this hour have been brewing our night-cap in preparation for turning into bed. I see now that you have reformed to the extent of giving up that injurious preparation.

Juridicus. It was a hallowed practice, approved by all the philosophers and wits, from Ben Jonson to Christopher North. I found it a hard task to give it up, my dear friend; but you were so decisive on the matter when that attack of gout troubled me, and your learned brother, who is not such an opponent of wine as you are, so entirely and independently supported your view, that I was forced to obey. You, moreover, had Helena with you, after which my non-compliance might have led to any disagreement short of actual divorce of feeling.

Physicus. You do not, up to this present time, regret the change?

Juridicus. In my heart I am glad of it, but I should be false if I did not say I have still a lingering appetite. I am something like Robinson Crusoe's man Friday, who forgot his cannibalism when he had buried his enemies, but felt all the pangs of it revive when he turned their bodies out of the sand. Whenever I see the preparation in progress,

I feel as if I must join in the fray. The cutting up of the lemon, the mixture of the poteen with the water, the crushing up of the sugar, the old jokes about that splendid toddy-maker, dear old "Summum Bonum"—these details, and a hundred more, all crowd on me to tell me that my hand has not really forgotten its cunning.

Physicus. Such automatic acts are, it is true, most difficult to forget; the pity is they were ever learned. But you are greatly benefited, at any rate, by giving up the "night-cap."

Juridicus. Unquestionably; and I thank you for the real service you rendered me when you insisted so strongly against it. I believe if I had gone on I should have been incapacitated long before this time.

Physicus. You would have been. That is a fact I may now venture to tell you. I know of nothing that kills men off like that fascinating night-cap, that finish to a day of moderate indulgence in wine or beer, or other lighter fluid. It is the lethal spell to death at prime of life beyond all others.

Juridicus. A good number of our friends have passed over quietly to the great majority, I fear, from that cause.

Physicus. More, probably, than you suppose. It is, in fact, a form of slow, and, if I may use such an expression, of respectable suicide. The first warning is often an attack of gout, which is itself a sign of degenerative decay. Then follows a frequent weakness and a want of elasticity which is not natural to the time of life. By-and-by it is said of the sufferer that though he is comparatively young he is beginning to look old. He is not more than fifty-four or fifty-five, but he is ageing too fast. At last you hear that he is suffering from heart disease, or dropsy, or albuminuria, or diabetes, or consumption, and upon this you soon have the news of his death.

Juridicus. Unless he die suddenly, as so many do, from apoplexy.

Physicus. Your correction is sound ; many die in that way. The vessels of the brain, without any obvious sign that they are wrong, undergo change of structure. They lose their elasticity, their walls become firm and unyielding, and one day, when a little undue pressure is put on them, perhaps from excess of alcohol itself, a vessel gives way, and the man falls as if struck down.

Juridicus. That is apoplexy to the letter. The word means to be smitten or struck down, does it not ? And then the smitten die.

Physicus. Not always at the time. Some recover after suffering what is not incorrectly called a "stroke," or a "stroke of paralysis"—for these vulgar terms are often very expressive—but the stricken rarely make perfect return to health, though they may live for many years.

Juridicus. That was the fate of our mutual friend, Dr. Maple, a fate he described to me with his usual felicity of expression and freedom from professional jargon. He said he was never what is considered to be an immoderate drinker. He took what he thought and felt was good for himself, and he held such men as you, Physicus, and your abstinence colleagues, to be extremists.

Physicus. Much the same as another friend of mine holds us to be.

Juridicus. Never mind. Maple was a member of your profession, and he was, according to his own expression, of opinion that you total abstainers were a set of extremists, if not fanatics. Under this view he partook of alcoholic drinks, keeping within what he supposed to be the line of prudence. When he approached his fifty-ninth year he became, he said—I am quoting him all but *totidem verbis*—he became just conscious that at times, after wine, he had an unpleasant fullness in his head which did not clear off. He was suspicious himself that the vessels of his brain were losing their elasticity, and that they did not bear the

pressure from any kind of work, from physical strain, from mental strain, or from alcohol, as they once did. The result was, he reduced his "modicum" of wine to a safe abstinence, and with great advantage. One day, however, on a convivial occasion, he was tempted to take a glass or two of excellent champagne, after he had imbibed his usual quantity of sherry, which was his common stimulant. Within an hour he was aware of the injury which that little extra champagne had wrought upon him. The dullness in the head, and the oppression from which he had been for some months quite free, returned in a worse form than he had ever before experienced, and in a short time he was conscious that under undue pressure a vessel had either given way, or the course of blood through one of the vessels of his brain had been stopped. He sank into a semi-conscious state, and when he awoke from it he found that the right side of his body was paralyzed, and that he had lost the correct meaning of many words. Happily for him, the mischief inflicted was not so severe as to prove fatal, and he has made a slow recovery. He came here to visit us in a friendly way, and has since, I believe, resumed a part of his professional work, but he is not the man that he was, and he never will be again.

Physicus. A most precise statement, Juridicus. No learned pathologist could have set it forth better to the world. That little extra pressure from the alcohol did precisely what you have so correctly described.

Juridicus. I take no credit for the description, because I am the mere reflex or echo of our friend. But his account interested me, as did also some of his speculations respecting himself. He argued that the right side of his body failed first, or "preferentially" to the left, because he had worked it more. And he attributed his recovery not to actual restoration of function of the half of his brain that had been injured, but to the assumption of new func-

tions in the other half, which had, as he thought, been lying fallow all the previous part of his life.

Physicus. Both subjects are of intense physiological interest ; and to our friend, who is a psychologist of a very fine order, as well as a physiologist, they would occur with great readiness. His observations surely impressed you with the view that we who oppose unnecessary stimulation are, after all, not such extremists as the world holds us to be.

Juridicus. It had the effect of making me more careful, and of not exceeding rule under any circumstances. If I feel that wine is in the slightest degree affecting my head, I stop it immediately, just as I should stop running, or over-walking, or going into too high a temperature in the Turkish bath, or getting into a passion, or, in fact, indulging in any other form of excitement that declared itself unsuited to my constitution.

Physicus. In plain words, you march just up to the edge of what is right, without going over entirely to the right.

Juridicus. And have the pleasure of exercising a freedom of action which gratifies me, and proves my strength of will.

Physicus. Nay, which proves your obstinacy of will, and to a certain extent the limitation of your knowledge. Suppose I tell you that the sensations which you know are dangerous symptoms when produced by alcoholic drink, are not all that are to be feared from that source. Should you then be so confident in your judgment ?

Juridicus. That is a question I cannot answer until you explain the dangers to which you refer.

Physicus. They are definite dangers. It is not the mere stimulation that is to be dreaded—not the last rush of blood which breaks through the weakened vessel—but the preparatory change which makes the vessel weak and in-

capable of resistance. In plain words, this enemy, alcohol, like a skillful general, saps the citadel before he blows it up; and so while you are waiting for the first indications of danger, which I find you know so well, you are letting the agent that gives the indications prepare all the conditions by which the worst effects of extra stimulation are brought into play.

Juridicus. That certainly is another view of the subject which did not occur to me, and which separates the action of alcohol as a destroyer from mere stimulation, while it adds to the dangers of every kind of stimulation.

Physicus. You appreciate quite correctly, and the exposition is one I have almost daily to enforce. I am constantly asked how alcohol, if it excite the heart even to the full extent assumed, can be any worse in this respect than the other agencies you have named—running, drinking, anger, and the like. I have to explain that alcohol exerts a primary or preparatory mischief, as well as a possible final overthrow.

Juridicus. In fact, it prepares the way to make any of the other stimulations, as well as its own, cause the overthrow.

Physicus. It does, and for that very reason persons who are injured structurally by it, are in greater danger than others from the influence of the other stimulations. They are struck down by violent exercises, mental and bodily, more readily than others who are free of the changes induced by alcohol.

Juridicus. That I can readily believe; and, indeed, I know it to be true. There are two neighbors of ours here who are of the same age and build, and who are as much alike as any two men can well be in condition of life. One of them is an abstainer, the other “a free liver”—not a drunkard, but “free.” One day when I was at the station they both came running to catch the train, and the differ-

ence in the two men was really striking. The abstainer came in like a schoolboy, "not a bit blown," as we used to say, while his friend, utterly disabled, panted and trembled as if he would fall, and after he was seated in the carriage, was a full hour before he had recovered from his shock. It seemed to me that the man escaped as by a miracle.

Physicus. It is very common for men so conditioned and so circumstanced to die from the exertion. Indeed if they do not die then, they prepare themselves for the event more completely by the strain they have undergone. The facts, altogether, are to my mind as conclusive as can be found against the use of alcohol, and they alone would influence me if my physiological and medical knowledge afforded me none other.

Juridicus. They are not without their influence on me. They exert, I am sure, a most wholesome influence. They teach me the difference between the proper use and the abuse of alcohol, which, of all information, is that I most wish to possess.

Physicus. But what you call abuse another man will call use. Where, in the name of all that is reasonable, do you draw the line?

Juridicus. Each man must draw it for himself, and get the proper knowledge where to draw it from his own experience.

Physicus. How is he to learn the danger or signs of danger by which to draw the line?

Juridicus. My dear Physicus, you and your school of men are teaching him, for which reason I admire and commend your teachings with all my heart. I hardly regret that you go so far as you do, seeing that, with some exceptional difficulties which you do not meet, you have a sound and logical course before you. At the same time, you do go too far. At least, that is my candid opinion.

Physicus. Where would you have us stop?

Juridicus. At the point up to which you have proved all you assert. Stop there, and you are safe.

Physicus. We think that is the point, the very point at which we stop now.

Juridicus. Then you err, and try to confirm yourselves in the error. You prove against fact.

Physicus. Give me an example of what you mean—some example of the strongest kind, in your estimation.

Juridicus. Willingly. You say that the use of alcohol leads, physiologically, to the production of certain organic changes within the body, which changes are detrimental to life, and which shorten life. Is that not so?

Physicus. It is.

Juridicus. Then I reply that, according to my own experience—which, in this matter, is as good as yours, seeing that it is founded on direct observation, and is so far experimental—even the *abuse* of alcohol does not, of *necessity*, shorten life.

Physicus. You refer to cases in which drunkards have lived to a ripe old age.

Juridicus. You strike the nail on the head. There was my own uncle, a clergyman, by the way, who ought to have known better, and probably would have learned better, had he not been badly taught in his early life, who was what you call a wine-bibber—I had nearly said from his cradle. I never knew him take less than a bottle and a half of wine a day; he was never particular what else he took; and he never missed an occasion for taking something else.

Physicus. It was he, I believe, who said—"champagne for a wedding, because of its sparkle; Madeira for a christening, because of its sweetness; and old port for a funeral, because of its age."

Juridicus. That was the man; and his parishioners, without an exception, indulged him in his fancies. Well,

it is true that he actually lived on until he reached the patriarchal age of eighty-seven. He hunted till he was seventy, and would have hunted much longer but for a physical accident that rendered hard riding dangerous. At seventy-nine he was as good a shot as one man out of ten who pulls a trigger on the first of September.

Physicus. And he died at last, in spite of all his accomplishments.

Juridicus. I should think he did ! But he died at eighty-seven. What is more, he retained the use of his faculties to the end of his life, barring a few hours. True to his ruling passion, moreover, the last thing he asked for was a glass of the oldest port in his cellar ; and when he had tossed it off, he put down the glass with his usual exclamation, " Old port for a funeral, because of its age."

Physicus. Such a man might have lived twenty years longer had he lived naturally !

Juridicus. That is a speculation with which I can have no sympathy. I want to know why he did not die at the prime of life. He certainly did not pass beyond that by avoiding alcohol.

Physicus. You wish me to reply to this poser. Before doing so, I must, like a Scotchman, answer your question by asking another.

Juridicus. Proceed.

Physicus. You admit, do you not, candidly, that the example you have cited is exceptional ?

Juridicus. I admit that.

Physicus. I must go further. You admit it to be most exceptional ?

Juridicus. I fear I must give you another affirmative.

Physicus. One more question. Did you ever know a woman who drank to the same extent live to the same age ?

Juridicus. No. That is a singular fact ; I never knew a woman who drank at all freely who did not die early.

Physicus. Nor I. Again, did you ever know a man who became a hard drinker late in life live to an old age?

Juridicus. No. It is true that men who plunge into excess at middle age die very rapidly from their excess; and, indeed, the people, who are often correct in their sayings, comment on that fact. It is said of such men, that they could not stand drink like other men, because they were not "seasoned" to it. But let me remind you that you are taking considerable license with your cross-examination. You proposed to ask one question, and you have got up to three already.

Physicus. I am quite in order. My cross-examination as you call it, bears purely on the examination in chief. And, I must add yet another inquiry. Did you ever know a man who led a sedentary life live on, as your relative did, while taking the same amount of alcohol?

Juridicus. My experience, perhaps, is limited on that point; but in so far as it goes, it can only give another affirmative to your question. It is my experience that persons of sedentary life, who indulge in much less alcohol than I have indicated in my exceptional example, die very early.

Physicus. I could prove that to you on another occasion, from an experience that is beyond dispute.

Juridicus. I dare say you have chapter and verse for your argument, and I do not question it for a moment.

Physicus. So far, then, the position is as follows: One man who from early life has been a hard drinker lives to be eighty-seven. He is the exceptional example of a class of men. No woman is to be found in that very exceptional class. No man who became a hard drinker late in life is to be found in it. No man who leads a sedentary life is to be found in it. Is that fairly put?

Juridicus. Quite fairly.

Physicus. Then I am satisfied. The apparent existence

of such an exceptional class of men is admitted on my part fully. This class, however, is not really exceptional, for the members of it might, under more favorable circumstances, live longer than they do. But let that pass—they are exceptional to the majority of alcoholics, because they live long, while the majority die young. You wish to know why they are exceptional?

Juridicus. Not quite that. I argue from them, as admitted exceptions, that alcohol is not the certain destroyer you make it out to be.

Physicus. Argue as you will, I have reason and truth on my side, which your judicial mind must, I think, admit. I reverse your position. I ask, if these particular men live so long under alcohol, why do not all live the same length of time under the same conditions?

Juridicus. That is a perfectly fair and legitimate question, but it is not my business to answer it, even if I had the skill and the knowledge. I wait an answer from you to the question, why some hard drinkers live to be old?

Physicus. The answer is as plain as the sun at noon-day, and I am glad you have raised the issues leading to it. These exceptional men live long under alcohol because they have become physically adapted for the quick elimination of it from their bodies. In their early life, while their bodies were in process of growth and development, their eliminating glandular organs—their kidneys, their skin, their liver—met the difficulty by attaining, under the pressure caused by alcohol, a larger capacity and a greater functional activity than was natural. In the course of their lives they were always on the move in the open air, taking sharp exercise, and throwing off very freely the products of their excretion. Lastly, they were men favored by birth with what is called a sound and healthy constitution, which means that they were not cursed with hereditary proclivities to fatal diseases. Thus favored on all

sides, favored with large and active eliminating organs, favored by mode of life which kept up steady and free elimination, favored by constitutional build, they were able to resist the enemy, or more correctly speaking, to elude his power.

Juridicus. While women who do not, as a rule, learn to drink in early life, and men who learn to drink late in life, and such men and women who drink and sit still, and men and women who drink and go about but who inherit some fatal malady which turns the scale against them, succumb to what you call the enemy?

Physicus. You sum up my argument. Is it, O Justice of Justices, just?

Juridicus. In the example from which it started, the example of my patriarchal relative, your argument has fair illustration. He did eliminate, as you say, most freely. He was ill if he kept the house a day, and he was free of any inherited disease. His father, who was too miserly to spend a penny on indulgences, died at seventy, from an accident, and his mother, who was considered of strange habits, because she was all through her life a *water-drinker*, lived to be nearly a hundred. Altogether, I must admit that the balance of evidence is on your side.

Physicus. That is not all that my argument deserves. I think it goes to determine that the exception you have set up proved the rule I have ventured to lay down, that indulgence in alcohol shortens life, and that the line between use and abuse is too refined to be considered as an excuse for use at all.

Juridicus. I must sleep before coming to a decision on that vital point. You drive me too hard at this late hour.

Physicus. It is, indeed, time for sleep, so let us say—Good-night.

DIALOGUE VII.

OBSERVATIONS ON NATURAL SLEEP—IMPERFECT SLEEP INDUCED BY ALCOHOL—EXAMPLE IN THE YOUNG—DANGER OF SLEEP AFTER WINE—DIFFERENCE BETWEEN SLEEP AND NARCOTISM—DEATH FROM ALCOHOLIC NARCOTISM—A CASE IN POINT.

Helena. I fear you gentlemen kept up your conversation last night until the little hours.

Physicus. It was a return to old times. We were discussing alcohol.

Helena I expected as much, and I hope you are none the worse for your revelry.

Physicus. I like the idea of revelry. Well, it was so after all. We reveled, in contention, as of yore, but with a more serious intent, not altogether unaccompanied by anecdote and repartee.

Helena. Whatever it was, it kept your friend Juridicus awake in his study after you retired, and asleep in bed after you had risen. He is not yet down. Your potations must have been deep.

Physicus. Not, I think, to excess. Not more than a few rounds in the garden would suffice to dissipate.

Helena. You seem always to rise early.

Physicus. If it were possible I would never be later than the sun at my work.

Helena. You would make the sun your fellow-workman?

Physicus. Pretty nearly so.

Helena. And how many hours then would you sleep?

Physicus. At my time of life, which is fifty years, I

would sleep seven hours in the summer and eight in the winter months. I could not, therefore, quite move with the sun.

Helena. In watching how much you are occupied, and in what various lines of thought and action you are engaged, I infer that you must be a good sleeper?

Physicus. I take it as a sure sign of working power to be able to sleep well. As a rule, I sleep from seven to eight hours without a moment of disturbance, and while that rule is maintained, I can work for the rest of the day to almost any extent.

Helena. But is it not very difficult to fill up so many occupations?

Physicus. On the contrary, there is rest in variety. No men are so soon wearied, and so soon miserable, as they who are bound to one exclusive occupation either of mind or body.

Helena. Returning to sleep. Do you think that you gain the required period of absolute repose, the perfect "twinkle of oblivion," as Wordsworth calls it, more surely or less surely under the regime of total abstinence?

Physicus. On that point I can have no doubt. From the period of adolescence, when I, by education in the common ways of the world, ceased to abstain, up to the time when I resumed abstinence—a period of nearly thirty years—I never had what may be truly called natural sleep. I slept well, compared with others, but never with the same freedom from oppression, and dreams, and nightmares on occasion, as I slept in my early life, and as I have slept for the past few years.

Helena. I once observed a fact which bears out what you say. Our eldest boy, Harry, up to the time when he was ten years old, was the most perfect sleeper I have ever seen. He would tell me in the morning when I went to wake him, that he had only shut and opened his eyes.

Physicus. That is the perfect sleep, the "twinkle of oblivion" pure and simple.

Helena. It must have been, for the boy was in the prime of health. When he was ten his papa took him to see an old uncle, of whom you may have heard, an eccentric old clergyman.

Physicus. The gentleman who went in for champagne at a marriage, Madeira at a christening, and old port at a funeral?

Helena. The same. While there the boy was taught to take a glass of wine at dessert. The child at first actually rebelled against it, and thought the wine the most nauseous stuff he had ever tasted. He wrote me that it burned his throat. But the old man persuaded him to go on, using the usual cant, that a good glass of wine would build him up, make him a man, and all that sort of thing, until at last the boy got to tolerate the wine, if not to like it.

Physicus. That is the usual bad course. And what was the result?

Helena. The boy came home after a couple of months thoroughly changed. His stomach was deranged; he constantly required medicine; he could not sleep at night until long after he got to bed; and, when he did sleep, he was so restless and noisy in his breathing, I had to go and wake him up, and redispense him in bed, to get him quietly off to sleep again. Then he would wake with starts, and cry out; and all his old playful energy was gone for half the next day.

Physicus. And what did you do for him?

Helena. We carried out all the old women's remedies, some of which, by the way, your profession supplied, but he remained the same. As he had got accustomed to the wine, we were advised not to take it from him, lest he should "go down." At last my maternal watching led me to note that Master Harry, small as he was, was getting a little more familiar with wine than I felt to be right.

Physicus. That was likely enough ; in fact, a certain result.

Helena. So I imagined, and it made me anxious. In a little time I could bear it no longer. I thought it was the better of two evils that he should "go down" in physical strength rather than in morals; and so I took the bull by the horns one time when we were alone for a week, and forbade wine on the table altogether. He missed it for a day or two ; but as I abstained, he soon fell back into his old ways.

Physicus. And did not "go down?"

Helena. Quite the contrary, he came up. In ten days he was a restored child. He slept, as he said, "like a top." He enjoyed his old pleasures, regained his old sweetness of temper, lost his indigestion, and was so changed that his papa, on returning home, hardly knew him again.

Physicus. And what did my learned friend say in regard to the mode of cure?

Helena. Well, here he comes to answer for himself.

Juridicus. Good morning, Physicus ; what were you gossips talking about ? The old subject, I suppose.

Physicus. Yes, we were talking about you.

Juridicus. Oh, indeed. I imagined that Helena could only think, while you were here, of the all-absorbing question—the use and abuse of alcohol.

Helena. That is true also. We were speaking of the bad effects which wine exercised on our boy Harry, and of the quick recovery he made when he was relieved of the cause of the evil.

Juridicus I always confess you were quite right there, my dear ; and commend you for your discernment not less than for your resolution. I agree so far, too, with our friend here, that I would permit no boy or girl to take alcohol. I would prohibit wine to the young, as the old Greeks did.

Helena. And to the women, too, if you are going to follow a classical model.

Physicus. Certainly. By which plan we abstainers would soon win our battle.

Juridicus. I would not consent to that. My respect to women's rights does not go so far as some would like; but it extends to allowing them equality of freedom in the use of wine, if it does not to giving them a seat in the House of Commons.

Helena. Better, I think, to give them the seat in the House, and not to give them the wine.

Physicus. Admirable exchange of freedom. I shall say with Gratiano soon, "A Daniel! yea, a second Daniel come to judgment!"

Juridicus. This is a plot which I must unravel. It is clear my sluggard propensities have caused me to miss something I should have heard. What led up to Harry and wine, and youthful temperance, and the stupidity of Juridicus, and the wisdom of Helena, and all this sort of talk? I am behind the time, if not behind the scenes.

Helena. I can coach you up in a minute. I was inquiring of Physicus what effect alcohol had on sleep.

Juridicus. And he told you, like a true philosopher, that very often a man can not sleep without it.

Helena. He did not. He explained quite truly that nothing so surely diverts and perverts the natural sleep as alcohol. I adduced our Harry's case in support of that view.

Juridicus. I see. It is true that Harry, a boy, did get on better after we took away his wine. We are all as one on that point, and as to children generally. It is different when we come to people of middle life. Them, I am convinced, a moderate allowance of alcohol soothes, and when they are tired it gives them sleep. I am speaking on this point from personal experience.

Physicus. I regret to hear you say so.

Juridicus. Why?

Physicus. Because it is an unhealthy experience.

Juridicus. But the alcohol answers the purpose.

Physicus. Not correctly. It produces a narcotism, not a pure undisturbed and refreshing sleep.

Helena. I am sure you are right. I have said so over and over again. He returns home in the afternoon, dines, takes his wine, and almost directly afterwards dozes for half an hour. The doze is simply a troubled dream, with irregular breathing and frequent starts.

Physicus. A bad condition altogether, and subversive of the natural rest that ought to occur at the natural time.

Juridicus. I wake up, at any rate, feeling wonderfully refreshed and ready for anything. I can write in the library, read, play a rubber, listen to music, or enter into conversation with all the pleasure in life.

Helena. And sit up to any time wakeful as ever you can be, until you have taken another glass of wine to compose you again, and bring on another of those starting and distressing slumbers.

Physicus. I know the history as I know the course of the sun. It is a story which might be told by half the well-to-do gentlemen of the country. I do not wish to alarm you, Juridicus, but I assure you it is a system quite incompatible with length of days, and with that continued usefulness which you have learned to live for, and which your country should expect of you in return for her favors.

Juridicus. Spoken with schoolboy frankness, for which I thank you. I will amend my ways. But they are pleasant ways to have to amend.

Physicus. The pleasures of activity are more refined as they are also more ennobling and far more conducive to healthy life. I once had a friend, a well-known physician.

who had never experienced parental solicitude ; who, indeed, never saw his parents ; and whom I remember as one of the most delicate of young men. He lived through everything, made a great fortune, I should think, and for the passing hour a great reputation, the result of his success being attributable mainly to the pleasure of activity. He would never lie down to rest from the moment his head left the pillow until he returned to it for the night.

Helena. I don't suppose he recommended that system to his patients. He would not have been long popular if he had.

Physicus. He was not wanting in plainness of speech when he saw the occasion. I must do him that justice.

Juridicus. Did he abjure alcohol ?

Physicus. Practically he did ; though I do not remember that he ever declared himself on the subject.

Helena. The more the pity. There is my sister's physician, who, in his family circle, is as strong on total abstinence as you are, Physicus. He has not a drop of wine in his house, and yet when he is consulted he plays with the subject ; says he respects you, but considers you an enthusiast, a visionary, and all that sort of thing.

Physicus. He is quite welcome to his opinion. Such men are perfectly well understood by the public at large, and correctly weighed. They are the moths of society, who are always falling in the blaze of it. They are much to be pitied. But we are getting far away from the point at which we started.

Juridicus. It is all relevant to the question before us. We were discussing sleep from alcohol, and you, Physicus, said that the sleep it induces is not healthy. I should like the *rationale* of that statement.

Physicus. The *rationale* is easy enough. Natural sleep is a condition in which the brain and nervous centres are quite relieved from the pressure of the blood. The brain

does not work, because it is for the time unexcited to labor. If you could see it, you would see it bloodless in the ordinary sense of that term.

Helena. The poet's idea of the "shutting up of the senses" is literally true, then.

Physicus. It is. But when the brain is under the influence of alcohol its vessels are full of blood, and if the influence be extreme, the organ is positively congested. The sleep, therefore, of the alcoholic, is the sleep of congestion or narcotism, not the true and natural sleep.

Helena. That, too, is the cause of the difference of the phenomena observed in the sleepers.

Physicus. Precisely. The natural sleeper presents the phenomenon of entire and perfected repose. The alcoholic sleeper presents the phenomena of a man with congestion of brain.

Juridicus. Upon my word, Physicus, you explain as if every man who was having a deep snore after a sound potation was a man in a fit, and as if all the jolly old dogs of the empire were semi-apoplectics. It is too bad.

Physicus. It is too true, and you have tersely defined their position.

Helena. The flushed alcoholic face, for instance, is not that in fact the outward and visible sign of the flushed alcoholic brain?

Physicus. You may put it in that way without any error, and it is a striking way of putting it.

Juridicus. You do not easily forget the condition when it is impressed in that way, and it brings to my recollection many painful examples. I once rode by a night train to London with one of my colleagues on circuit. We had spent a merry mess-time, and when we got into the carriage he commenced to sing. He was not in the least intoxicated, but mellow. He was a young man, and too stout for his years. As the night progressed he fell asleep, and

I am bound to say his sleep alarmed me. His head sank collapsed on his chest; he had what you doctors call "stertorous breathing"; he blew his cheeks out with a puff; and his face, at first very red became so deathly white, I thought I must actually try and call the guard to stop the train. However, with a little difficulty, I succeeded in waking the sleeper, and though he had some other spells of a similar kind, we got to our journey's end safely, to my immense relief.

Physicus. Was he aware of his condition?

Juridicus. Quite, and laughed at it. Said he had had a dream with a fight in it, and only felt his throat a little rough and requiring a drink. I did advise him to give up wine; but he held that he was on the whole, a moderate man, and that he could not get on without a stimulant.

Physicus. You need not tell me the end of that man, because I know it. He died in one of those very sleeps in his chair.

Juridicus. He did, and a great loss we sustained in his death. King Alcohol slew a good man in him, I acknowledge. But then he carried it just too far.

Helena. To what point ought he to have carried it?

Physicus. Well, it happens that I reasoned with him on that very question. An observation from Juridicus, quite accidentally spoken, led him to come to me, and we fought out a pitched battle on alcohol.

Juridicus. He was a tough antagonist.

Physicus. Unquestionably; and unfortunately for me, I was then a prisoner in Doubting Castle, so that he beat me with my own weapons. Admitting, too easily, that he might require a little alcohol to spur him up on an emergency, he pinned me down with the admission, and then held me helpless on the question of the amount of alcohol necessary. What should it be under such and such circumstances? If so much failed, how much more might he

safely take? How should he measure the precise quantity? When he could not get one stimulant, what other should he substitute, and so on?

Helena. The end of which was that he was left, after all your consultation, to his own devices.

Physicus. Say rather to his own "experience and common sense," and you are right. Had I known the true thing to say, *abstain altogether*, that man might have been saved.

Juridicus. Might have been, but would not. There are too many counteracting influences as yet in the way of such advice to render it of direct utility. You do not seem to realize that the practical application of your present teaching would change the whole face of society. You would make a new social world, a world requiring new delights, new tastes, new modes of work, new bodies, and, I might almost say, new souls. I cannot conceive such a world.

Helena. I can; and I am morally sure it will come, though we may not see it; and I envy all, if I can envy any, who have lived to promote it and help it to its birth.

Juridicus. We all envy them, for that matter. And, though we venture to laugh at them sometimes, when they try to push us on at mail speed, forgetting that we are subjects only of free will, we love them none the less. But, hark! the gong invites, and breakfast waits us.

DIALOGUE VIII.

THE HYPOTHESIS OF NATURAL CRAVING FOR STIMULANTS—CRAVING *versus* PROHIBITION—THE INSTINCTIVE DESIRE QUESTION—THE CRAVING IN HIGHER AND LOWER ANIMALS—CRAVING IN RELATION TO EDUCATION—BRAIN-WORK UNDER STIMULANTS—FALLACIES—EXTRA ALCOHOLIC STIMULANTS—SIR HUMPHREY DAVY AND NITROUS OXIDE—ETHER DRINKERS.

Helena. The rain seems to have conquered your resolutions ; and so you did not reach the “rocking stone” after all ?

Physicus. We got within two miles of it, and, finding we should be thoroughly drenched, we, like prudent men, left the altar of the Druid for another day.

Juridicus. It will keep ; and the pleasure of a future walk or drive to it is still in our possession.

Helena. I am not sorry at your failure, if you are not disappointed ; for I have been thinking over many of the subjects upon which we have conversed, and have prepared quite a catalogue of questions to put to Physicus when he has rested.

Juridicus. You have no mercy on me who have to adjudicate.

Helena. None whatever, for I could do that.

Juridicus. Well, if Physicus is ready for another of our displays of forensic combat on his great and hideous foe, I am willing. What say you, Physicus ? Shall we retire to the drawing-room while the rain continues, and, after divesting ourselves of our overcoats, return, if I dare use the word, to our “symposium ?”

Physicus. With all my heart. The rain will not last long.

Helena. You are not wet through your overcoats, I hope?

Juridicus. No; we have escaped a wetting; and now, woman of women, what have you prepared for my unfortunate friend on that inquisitorial paper of yours?

Helena. Half a dozen questions, at least.

Juridicus. One at a time, one at a time. Let us have the first.

Helena. The first, then, Juridicus, is one which your conversations with me have suggested many times. It relates to what is called the craving for a stimulant.

Juridicus. That is a very good subject. We could not have a better. I know of no argument for alcohol more powerful than the natural craving which all men and nations seem to have for some form of nervous stimulant. I remember a reference to that point in an admirable article in the *Times*, on the Permissive Bill. The writer said—most cleverly, as I think, and exhaustively—that it is of little use to cut off the supply of alcohol, and to leave the craving for it as violent as ever!

Helena. Which argument would no doubt leave all measures of prohibition useless, because no law can touch a natural craving.

Physicus. If I might venture a word on that argument, I should say that the very able writer of the leader in question—in the particular instance adduced by Juridicus, who, with his usual accuracy, has quoted the precise words—simply put the cart before the horse.

Juridicus. I do not quite follow you there.

Helena. Neither do I.

Physicus. My meaning is plain. I mean that if there was no supply to prohibit, there would be no craving to satisfy.

Juridicus. I am still not clear. You surely do not contend that the stimulant produces the craving, and that the craving for the stimulant does not pre-exist in the man.

Physicus. That is my precise meaning; and it is the true reading of the difficulty you have raised.

Helena. But wherever man has existed almost, he has sought some solace to this craving. One savage nation has found it in alcohol; another in bang or hashish; a third in the poisonous or narcotic fungus, the *amanita muscaria*; a fourth in tobacco; a fifth in the coca; a sixth in the red-thorn apple; a seventh in opium, and so on. It could hardly, I think, be maintained that all these nations learned their craving from the thing craved for.

Juridicus. Impossible. The finding and using of the stimulant is obviously, as it has been well described, "the interpretation and declaration of a natural instinct peculiar to man."

Physicus. I do not wonder at your decisive mode of settling this question. For all that, I feel quite secure in my position, and shall be much surprised if I do not bring you into it. But we must proceed by analysis, step by step, and you must pardon me if I am sometimes tedious.

Helena. Oh, pray, let us have a complete mastery of this difficulty, if it can be arrived at. Its solution is a foundation for or against alcohol. It has been so dunned into me, from the hour I could reason until now, that a nervous stimulant of some kind was a natural necessity for man, and that the craving for such an agent was an instinct like the instinctive desire for food and air, that it is a part of my own nature to believe the statement unassailable.

Physicus. I can imagine that, and therefore the greater must be my care in disabusing your minds of what I conceive to be a natural error. To begin, then, I must ask your assent to one or two propositions bearing directly on the subject, and must dismiss them as we proceed.

Juridicus. We are attentive.

Physicus. You urge that aboriginal races of men in various parts of the habitable world have evinced this craving for a nervous stimulant, and have therefore found it. If that rule applied to all, as to a natural instinct like the desire for food, there should be no exception to the rule. No men have been found who did not desire to eat and to drink.

Juridicus. We do not suppose there have been.

Physicus. But there have been notable exceptions in respect to the instinct for the nervous stimulants of which you speak ; and as one exception is as good as fifty, I name the most striking. The New Zealanders never showed any instinct of the kind until we went to them and introduced alcohol.

Helena. The evidence on that point is indisputable, I know.

Physicus. Then you must allow that all people have neither the instinct nor the desire until they have acquired the desire by coming into contact with the thing that calls it into action.

Juridicus. They might have had the desire, and yet not have had the intelligence to find the stimulant.

Helena. Or the country in which they lived might not have afforded the stimulant, so that search for it would have been useless.

Physicus. Is it compatible with your reason that savage men and women originally went about searching for a nervous stimulant, in the same way as they went about searching for water, or animals, or fruits on which to feed, or for places in which to take shelter ?

Juridicus. No ; but in searching for one they found the other.

Physicus. That is entirely a different thing, and that is kept up to this day. It is my argument, that they by acci-

dent found those stimulants, and acquired their use, and created the desire. But that clearly could not be a necessity which was not sought for as such, and was found only by accident in searching for necessities.

Helena. I see the position. In like manner you would contend that a country which did not produce a stimulant, would not be a country in which man could be provided for, or in which he could survive, if the stimulant were absolutely a necessity of life.

Physicus. I should contend for that position, and I do not see where it is at fault. If the nervous stimulant were an absolute necessity for one man, or one race of men, and if the craving for it were the interpretation of that natural desire, then it would be also a necessity for all men, and the stimulant would be common to all; just the same as water, and food, and air are necessities in common, and are supplied in common.

Juridicus. You reason on man as if he were one of the beasts that perish; as if he required, like them, merely so much water, so much air, so much food. If man were a mere animal, your argument would tell with all the force you wish to claim for it. But man requires more; and this very craving which we are talking about is proof direct of the requirement.

Helena. That truly is very peculiar. It is only the higher animal, man, with his finer nervous organization, who requires the nervous stimulant or craves for it. You never find a domestic animal, however highly trained, asking for a nervous stimulant, which looks as if the higher nervous organism demanded the stimulant because of the higher duties for which it was designed.

Physicus. According to that, there are degrees of comparison in the requirement for the nervous stimulant. The higher the duty imposed on the nervous organization, the greater the necessity for the stimulant. If the first savage

who built a wigwam required a gourd full of a stimulant—say of wine—Sir Christopher Wren should have required an Atlantic of wine in proceeding to build St. Paul's Cathedral.

Juridicus. A skilful thrust, but not quite home. We mean that between the lower animal and man—even between the highest of the lower animals and man—there is a line of demarcation over which the craving for the stimulant does not go. Therefore the man requires the stimulant for the full development of his higher powers, or the craving would not be so decidedly manifested.

Physicus. Therefore, the man who does not take a stimulant, and has no craving for it, is incapable of the same amount of nervous work, of the finer kind, than is he who has the natural craving, and who gratifies it.

Juridicus. You are opening another question altogether. Let us keep to that we are upon. We were comparing the inferior animals and man in respect to the instinct we desire for stimulants.

Physicus. We were; and I am quite willing to follow up the comparison. I was, in fact, about to put it as one of my propositions to you. Do you maintain that the lower creation differs from man in any degree in respect to the craving?

Helena. Why, that is the distinction between the two; the one has the craving instinctively, the other has it not.

Physicus. What if both had it, the one as strongly developed as the other. Would the higher nervous organization of man afford any longer the explanation for the craving?

Juridicus. Certainly not. But the proof of the craving in the lower animal is first demanded.

Helena. And it must be proof upon proof before it could influence me.

Physicus. You shall have as many proofs as you please,

if you will for a few minutes lend me your attention, and accept my evidence. When I was conducting my researches on the influence of alcohol on the animal temperature, I fed pigeons on peas that had been soaked in a solution of alcohol. At first, as is the case with the human subject, objection was taken by the birds to the foreign substance in their food, and, in a few instances, the wiser birds objected to it altogether. But others, so far from objecting, soon acquired a taste for the foreign substance, and became decided alcoholics. They quickly were made sleepy, drowsy, and, in short, diseased animals. For that they did not care. The alcoholic constitution once pronounced on them, they were fond of the luxury that led to it; and if they could have talked to their abstaining fellows, what arguments they might have used. Happily for the world that feeds on pigeons, they could neither talk nor argue.

Helena. You give us a very strange case, in so far as birds are concerned.

Physicus. A horse will learn to drink beer. One day, when I was riding in a hired carriage near to Canterbury, the horse stopped short at a wayside public-house. I asked the driver what that was for. "The horse," said he, "always stops here for his beer; he wouldn't go by on no account; you couldn't whip him by, sir, till he has had his beer. His former master taught him to drink beer, and invariably treated him to it at this house, and here he'll stop till he gets it. It was the fact. A large tankard of beer was brought out for that horse, and he disposed of the fluid with as much relish as his master, and then went his way. "It's a shame," added the driver; "but young fellows from London, who like a joke, and who also like beer themselves, will sometimes give him a lot, and make him very drunk. Then he is awkward to drive and weak for two or three days afterwards, and we have to give him more beer to keep him up, which costs a lot."

Juridicus. I am aware, now you recall the point to my mind, that horses will acquire a craving for stimulants. When I was shooting in the Highlands, in 1850, there was a keeper who had a Highland pony called "Toddy," which got its name because it would drink cold toddy at any hour of the day, and would run after the drink when it smelt it. One day we made the animal quite intoxicated, so that we couldn't use him, and had to leave him to sober down. But I am interrupting your narrative.

Physicus. In some parts of the country it is the custom still to feed fattening calves with what are called gin balls. A portion of barley flour is made into a paste, and to the paste a measure of gin is added. The gin paste is then made up into rolls, and the calves are fed with the rolls, much in the same way as the traveler Bruce recorded that the Abyssinian lords were daily fed by their faithful wives. After this refreshing meal the calves are for a short time frisky and wild in the darkened warm cells in which they are placed to fatten. But soon they go down on their knees, and get exceedingly drowsy, and then do not rouse again nor care for anything until the next meal comes round. "They take very kindly to gin balls," a feeder of calves told me. "They like them better than anything else; and the gin keeps them so quiet, they are fattened up in half the time, in the dark. If we didn't give them gin, they would get restless in the dark, and wouldn't get fat."

Juridicus. I have seen the same process in the part of the country where I was born, though I have not followed it up so minutely. The evidence seems to favor the view that the alcohol causes rapid 'fattening of the animals—in which sense it is food. You must make a note of that, Helena, if you please, for a future reference.

Helena. I will. But, perhaps Physicus has yet something more to offer us in the way of illustration, derived

from other and different facts, which he has observed in the course of his investigations.

Physicus. I have one or two more facts which may interest you. Some years ago, when I was giving a lecture on the action of anæsthetic vapors, I had a pigeon which would walk into an anæsthetizing chamber, of its own accord, as readily as it would go into its cage, or climb on to its perch, and which would compose itself to the anæsthetic sleep at once with the most perfect equanimity. To the lookers-on this proceeding of the bird was a source of astonishment. The truth, however, was, that the animal in question had acquired a liking for the anæsthetic vapors. Like all regular toppers, it had its particular tastes, and preferred the vapor of methylene bichloride to that of ethylic ether or amylene. But in the absence of one vapor, it would always put up with another; and when it was brought near the narcotizing box, it would fly to it, and get into it as quickly as it could, and the more eagerly if any odor of vapor were diffused in it. I give this as one illustration, because it was so distinctly marked, and will be so well remembered by many who attended my demonstrations. It is, nevertheless, only one of its kind, and is not exceptional in any degree. There is, I believe, no domestic animal that could not be taught to acquire the craving for intoxicating drinks and for intoxicating vapors.

Juridicus. You make the craving, by your argument, a mere matter of education, extending to all animals that can be educated.

Physicus. I do; and I accept the fact as proof direct against the idea of connecting man specially with a stimulant, as if he alone wanted it. If this proof were not in my hands, I should be disposed to think there was something in the argument. If to learn to crave for wine or other strong drink were an act confined to man, as the special phenomenon of the act of speech is, the experience would

possibly suggest that wine was made for man alone. It happens in this case, however, that the strangeness of the phenomenon in relation to drink does not hold good. The lowly animals—the cat, the dog, the horse, the calf, nay, even the pig and the jackass—can learn to enjoy good drink equally with man.

Juridicus. If the day should ever come when, under the extending guidance of man, the alcoholic constitution shall be generally introduced into the ranks of the lower animal kingdom, it is difficult to forecast what developmental changes will take place. There will be new races of the lower animals, and breeds unapproachable. What short-horns we shall then have! What a splendid new breed of sheep another Jonas Webb will send to the prize show! What horses will run for the Derby! What hounds pursue the flying Reynard! What trustworthy carrier pigeons there will be! How much more faithfully and steadily the dog will serve his master! What fine pathological cats, dropsical and drowsy, will purr on the hearth-rugs! What butcher's meat will hang up in the shambles! How the lions will roar, and how the monkeys will gabble and chastise their better halves in the Zoological Gardens and in the traveling menageries! With what skill the buyer of animals would alter his computations, so as to estimate his bargains by the shorter life of that which he buys! What modifications of tables the accidental insurance offices will introduce by way of increased premiums for all travelers on horseback and by teams on the roads! How delicious it will be to cross footpaths in country fields where the oxen have so much brandy or beer put into their drinking water to keep them up and make them lively! My dear Physicus, you have suggested a picture indeed.

Helena. That truly will not be the day when "the wolf shall dwell with the lamb, the leopard lie down with the kid, the young lion and the fatling together; and a little child shall lead them."

Physicus. But of what import is that? If it be good that man shall possess for himself all the advantages which, up to this present time, have only been exceptionally possessed by the beast, why should the beast be deprived of the improvement? It is the duty of man to improve the life standard of every useful thing of life that is under his command. Let him be logical, and extend the improvements inflicted by alcohol, assured that whatever there is that is good in it, will be reflected back again to himself a thousandfold, in proportion as that goodness is extended to the world of creation beneath his own.

Juridicus. My dear Helena, I feel that we must so far give way to our friend as to admit that the desire for a nervous stimulant is not an innate faculty peculiar to man alone.

Helena. And that it would not be overwise to cultivate the faculty in animals lower than man.

Physicus. Pray go a step further, and throw in the lower order of man also.

Helena. I will even give you that point.

Juridicus. And I will not. I am too old a pleader to be caught in that trap, my clever antagonist!

Helena. Why not?

Juridicus. What is a lower order of man? Admit such an order, and you must define what you mean, by which he will lead you to throw in every man, woman, and child in creation. "Beware, beware, he's fooling thee!"

Helena. I confess I don't see it. If the use of the nervous stimulant is to supply a want to the nervous system, it must be most required by those who are most exalted above the lower creation, and least by those who are least exalted.

Juridicus. So that none except philosophers really should have wine. That is what your admission leads to inevitably.

Physicus. I should be sorry for it to rest even at that advanced point. I should like to show you that philosophers may safely be excluded also.

Juridicus. Precisely. That is the helpless point you wish to bring us to, and then you are satisfied. But you must wait. I have not yet quite mastered this curious subject of instinctive desire for a stimulant. Admitting, as I must, that the desire may be taught and learned, it yet seems always to be so readily supplied to man that he is, as it were, forced to acquire it, and afterwards impart it.

Helena. That is to say, the agents are always put into our hands in a manner too natural to be foreign to our tastes? What says Physicus to that view of the case?

Physicus. That it is equally as fallacious as the view of man being specially teachable. The truth is that it matters not how far the agent may be from the possession of man, he may still be educated to crave after it when it comes. It may be as artificial as you please, and yet as desirable.

Juridicus. But it must, in all cases, have one property common to all of its class—it must be a stimulant.

Physicus. No, even that is not necessary. You, Helena, enumerated on the last occasion a number of substances, alcohol, bang, opium, tobacco, coca, thorn apple, amanita, to which I could add many more. To the whole of these a desire can be attached, and a craving of the most intense kind. But when you come to consider the action of them on the body, it is as different as it can possibly be. One agent depresses the heart, another quickens it. One induces sleep, another induces a peculiar wakefulness. One is evanescent in its action, another slow and tedious. One excites laughter, another tears and melancholy. In a word, there is no uniformity of action at all; and if we admit one natural craving, we may as well admit a dozen, or any number that may be acquired, which number I know no

end to, until chemistry has exhausted her stores of substances to be used and craved for.

Juridicus. But wine, after all, seems to have taken the first place.

Physicus. By accident of discovery that *may be* the fact, though there are many other agents which, had they been discovered before wine, might easily have replaced it, and have gained as wide an acceptance.

Helena. Amongst savage people it might be that some common narcotic would gain a place as a stimulant ; but one can hardly suppose that a person of education and refinement would ever acquire a craving for anything except wine, or one of the allied alcoholic drinks. It is true, I have heard of the English opium-eater, De Quincey, and of one or two other eminent men who have been opium-eaters, but their examples are too rare to affect the general argument.

Juridicus. Far too rare, and also too doubtful. De Quincey took wine as well as opium, and most opium-eaters take it.

Physicus. I assure you that the very wisest men can acquire a craving for agents that are not alcoholic, and can learn to prefer them to alcohol in any shape. You will not consider Sir Humphrey Davy a bad authority on this question ?

Juridicus. Assuredly not ; but how does he come into the business ?

Physicus. Sir Humphrey Davy conducted a beautiful and original research on the action of nitrous oxide gas on the living body.

Helena. You refer to the gas which dentists use in these days for making the body insensible to pain during the extraction of a tooth.

Physicus. The same gas. Sir Humphrey, indeed, first suggested its employment for the purpose of removing

pain during surgical operations. I refer, however, now to his own personal experience as to the effect of the gas on himself. He inhaled it many times, and at last got such a craving for it, that he says a desire to breathe the gas was always awakened in him by the sight of a person breathing, or even by the sight of a gas-holder.

Helena. Incredible !

Physicus. Yet most true. I have given you his own report, and I could confirm it by an experience very nearly the same.

Juridicus. Is there nothing exceptional in these examples ?

Physicus. I can see nothing. In the north of Ireland the people of some of the villages have acquired the habit of drinking the light fluid which is called sulphuric ether, and in a short time their craving for that fluid is equally pronounced.

Helena. But how do they manage to swallow such a fluid ? I have heard of the proceeding, but could not realize it.

Juridicus. When we were in Dublin we were regaled with that story at a dinner in Merrion Square. A very clever youth, whom we took for a medical student, told us about it, with infinite humor, and yet with such minuteness of detail that we half believed him. He named a place called Draper's Town in the Maghera, where the practice is most rife, and brought his narrative to an admirable climax by the statement that, after an ether bout, you could smell the breaths of the natives half a mile away from their houses. I fancy you must have seen that youth, Physicus ?

Physicus. I have not seen the youth, and I give him some credit for a little touch of imagination. But I have done better than your informant ; I have been to Draper's Town myself, and have investigated the whole matter. It is quite as true that the ether-drinker exists and has his

cravings for his favorite drink, as that you, Juridicus, have your cravings for your favorite Mansanilla.

Helena. How did such a practice originate?

Physicus. I will tell you the story as it was told to me on the spot where the practice commenced, and I believe what I was told is nearest to the truth, though other explanations have been given.

Helena. We shall be all attention, I assure you; but not at this moment, if you please. I have some household duties overdue, and my domestics will find the best excuses for delays if their mistress sets them the example.

Juridicus. Away to the duties, and we will wait your return before we have another word about Maghera and the ether-drinkers.

DIALOGUE IX.

ETHER-DRINKING—ORIGIN OF THE PRACTICE—ITS EXISTENCE IN IRELAND—SOCIAL EFFECTS—PHYSICAL EFFECTS—ACTION OF ETHER AS AN INTOXICANT—COMPARISONS WITH ALCOHOL—ETHER *versus* ALCOHOL—ULTIMATE EFFECT OF ETHER ON THE BODY—FURTHER COMPARISON.

Juridicus. And how, my dear Helena, have domestic troubles settled on your conscience to-day?

Helena. The results of the day must prove the answer to that question. The woman only arranges; the man adjudges.

Physicus. You need not fear the judgment this time.

Helena. I do not. Juridicus is too busy with his own affairs ever to find fault with mine, and is so little affected by what lies out of his immediate thoughts, that a far worse wife than I am might, I really believe, have given him equal satisfaction.

Juridicus. You are fishing for compliments, my Helena, this morning.

Helena. Not at all. I am fishing for quiet, that we may get at the story of the ether-drinkers. When I left, you were on the point of telling us, Physicus, the mode in which the practice commenced.

Physicus. I will tell you that, and much more that I was able to learn in the district itself where the practice flourishes. During the mission of the illustrious Father Mathew, that useful social laborer visited the north of Ireland, and in the course of his labors was so successful, in

the districts to which I am now referring, that he brought, practically, the whole district over from hard whisky drinking to total abstinence. The change was a social revolution for good, and has been effective for good up to the present hour, though hundreds of those who took the pledge from the Father have died, and no one like him has roused the younger generation to the same enthusiastic zeal for temperance. Father Mathew converted the district to his views. He may be said, in a certain sense, to have converted Ireland, for he lighted a fire which has never died out ; but this particular district he converted most effectually. After his visit the whisky bottle and the still fell out of favor altogether, with the most evident signs of improving social progress and happiness. Unfortunately, one day, some cunning, diabolical spirit brought into Draper's Town the ether bottle. "This," said he, "is not whisky, and it will do you no harm. It is not strong drink, and you may taste it without in any degree breaking your pledge. Very little of it—not much more than a thimbleful—is required to cheer your spirits." "The new drink" was thereupon introduced, and has been in operation ever since. It got its introduction about the year 1842-3 ; was systematically sold as an intoxicant in 1846-7 ; and for thirteen years, at least, it was used freely for this purpose.

Juridicus. And who were the retailers of the ether ?

Physicus. It was not sold regularly at spirit stores. If it were sold there, the sale was concealed. A glass of the "new drink" might be permitted to oblige a customer, but the spirit-seller did not make a trade of it, partly, perhaps, because the sale of it was opposed to his interests, and partly because it might have led to the unpleasant interference of the excise officers. The excise could not have objected to the sale of the ether, since it was all made from methylated spirit, which is exempted from duty, but they

might, nevertheless, have become very troublesome if, on pretext of inquiring into the sale of the "new drink," they had looked into other details which enter into the business of the most respectable dealers in other liquors. As a result, the sale of ether was confined almost exclusively, as it still is, to grocers and to small general shopkeepers. I was shown two or three of these shops as the chief depots.

Helena. We have yet to hear how the ether-drinker swallows his potation.

Physicus. The customer who is given to enliven himself with ether swallows his draught, commonly, at the place of sale, though some take the drink home. There is an art in swallowing the ether. The drinker first washes out his mouth with water "to cool it." Next he swallows a little water to cool his throat; then he tosses down the glass of ether; and, finally, closes in with another glass of water, to keep the ether "from rising," in other words, to cool his stomach, so that the volatile ether may not be lost by eructation of its vapor. In a little time the trick is easily acquired by members of both sexes.

Helena. And how much will a person take at one time?

Physicus. The quantity of ether taken at a draught varies with different persons. Mr. H. Napier Draper, who has favored me with two admirable little papers he has published on this subject, in the *Medical Press*, gives from two to four fluid drachms—that is, a quarter of an ounce to half an ounce—as the usual quantity. Before I personally inquired into the question, I should have considered the quantity of half an ounce as a dose of ether impossibly large to swallow at once. I am convinced, however, now that it is an under-statement of the usual dose. A confirmed ether-drinker will toss off a wineglassful of the new drink and not be afraid, and a full-sized wineglass will hold three fluid ounces. It is not all who indulge to this extent; but few take less than half an ounce who take any at all.

From half an ounce to three ounces may be put down as the range of potation.

Juridicus. Excuse the interruption; but is that quantity large compared with what you administer by inhalation when you use ether for preventing the pain of an operation?

Physicus. Compared with the quantity that can be administered by inhalation, this amount is not singular as an amount. The singular part is that so much can be taken as drink, and not be rejected at once by the stomach.

Helena. Is it pure ether they swallow?

Physicus. The ether that is imbibed is not actually the pure ethylic ether. It is made from what is commonly known as methylated spirit, the spirit which is used ordinarily for lamps and other every-day purposes. Methylated spirit contains wood spirit or methylic alcohol which has not been carefully distilled, and which in this impure state has combined with it some pyroligneous compounds, small in quantity, but very nauseous to the taste.

Juridicus. So that impure alcohol being free of duty, the ether-makers or importers who supply the "new drink" are enabled to supply it cheaply.

Physicus. They can supply it at from one shilling and threepence a fluid pint—certainly five times less than the cost of pure ethylic ether, as we buy it retail in London. Mr. Draper very clearly points out that if the ether had not been marketable at the price paid for it in the ether-drinking districts, it could never have been introduced as a new stimulating drink.

Juridicus. That means a heavy loss to the revenue.

Physicus. Estimating the consumption at four thousand gallons annually, Mr. Draper shows that if whisky were taken in the same proportion, the excise return from it would amount to £5,666 per annum. The excise authorities are in this way deprived of a considerable income, pre-

suming always that the equivalent of whisky would be taken if ether were not taken. For my part, I do not think that whisky would be taken, in substitution, to the full extent; but more, in all probability, would be taken at this time, when the original effect of the temperance pledge has almost died out, if ether were unknown.

Helena. The result, in the long run, does not affect the wealth of the community. If more whisky were taken and more excise duty paid, there would be more than a corresponding evil inflicted by poverty, loss of useful labor, and increase of crime. But please tell me what are the physical effects of ether-drinking on the life of the drinker?

Physicus. It will be gathered from what I have said, that the ether which is consumed is a mixture of ethers and of some other organic substances. It contains two ethers, some light methylic ether dissolved in the heavier ethylic ether—common ether—a little ethylic alcohol which has not been separated by distillation, and some organic odorous compounds or pyroligneous impurities, which have also distilled over in the process of manufacture.

Helena. Does not the ether boil in their mouths when they are drinking it?

Physicus. This impure ethereal compound does not boil at so low a point as the best ether does; it requires a temperature of 108° for its perfect boiling, until it is all dissipated. It also dissolves in water more readily than pure ether. One ounce of it will dissolve in eight and a half of cold water at 50° Fahr. It can, therefore, be swallowed with tolerable facility.

Juridicus. Does the intoxication produced resemble that caused by vinous drinks?

Physicus. From what I learned as to the effects of the fluid, they are due, practically, to the two ethers—methylic and ethylic. A draught of from three to four fluid drachms is followed by flushing of the face, rapidity of the pulse,

elevation of the mind, and unsteady or uncertain motion of the body. The first and second stages of excitement, similar to those caused by wine, are developed by the ether, but so rapidly and running so sharply the one into the other, that the two stages, which are very distinct in the process of alcoholic intoxication, become hard to distinguish. In these stages the ether-drinker is, as a rule, loquacious and "free of his mind," as one person described and tersely explained to me.

Juridicus. And get up a good Irish row, I should suppose?

Physicus. Well, he sometimes shows his teeth; but to laugh like a person in hysterics, is generally the principal sign of ether-drinking. The pugnacious may be inclined to fight in these stages, and if they do fight they seem strong and struggle a good deal, but without much sense or judgment. In this respect, again, the ether-drinker resembles the touchy alcoholic during the first stage of his mania.

Juridicus. And, as a matter of course, his anger is a shorter madness as compared with that which is produced by alcohol?

Physicus. There is a great difference between the action of alcohol and ether in that respect. Alcohol, steady in its action, soluble and slow of elimination, clings to its man, holds by him, keeps up his excitement a long time, and leaves him depressed, melancholic, weary. Ether, on the other hand, rapid in its action, feebly soluble in the blood, quick in being eliminated, escaping, in fact, by all the eliminating organs, speedily quits its man, and, without causing any great strain on his physical powers, leaves him suddenly a sober if not a wiser man.

Helena. I can imagine that to the quick perceptive and easily delighted Irish minds, these sudden ebullitions of intoxication afford many opportunities for sally and native wit.

Physicus. The idea of the economy of the process seems to have tickled them a little, but I could not hear that the new practice had added materially to their resources of wit, or to their natural lightness of disposition. In these particulars ether is to be credited with nothing sparkingly new. There was, however, one story current which was thought rather fine.

Juridicus. What was that?

Physicus. You love a story. It is that once in the ether-drinking districts a stranger came to visit his brother, and asked his brother, who was suddenly roused into a state of great elevation by a large dose of the "new drink" what nonsense that was? "Nonsense," screamed the ether inebriate—"What do you think of being got up to this for threepence?"

Juridicus. Do they often pass beyond these first lively stages of excitement?

Physicus. The greater part are content to stop at the first two stages of intoxication, but some go further, and, passing into a third stage, become at first extremely violent, and after a while quite insensible. They are, as it were, dead drunk, lie breathing heavily for half an hour or more, and afterwards wake suddenly quite sober.

Helena. That is a very dangerous condition, in which I wonder many do not die.

Physicus. A few do exceed this extreme limit, and indulge in a poisonous potation. Dr. Morewood, of Draper's Town, who gave me a most careful description of the symptoms produced, told me that a short time before my visit he was called to a man who had taken a large dose of ether, probably after having taken some whisky, and who suddenly fell and ceased to breathe. Before Dr. Morewood reached this man he was dead. In three other instances in Dr. Morewood's practice an all but fatal result followed the taking of a large dose of ether; but by artificial respi-

ration the life was sustained until the ether had time to eliminate from the body. Recovery thereupon occurred, but the danger was deadly imminent.

Juridicus. And are there not some untoward events of other kinds not actually fatal at the time, but accidentally dangerous?

Physicus. Mr. Draper, in his paper, refers to a case in which the vapor of ether in the breath of an ether-drinker caught fire. The drinker in this instance was reported to be always imbibing ether, and one day after swallowing a quantity, he went to light his pipe, when the fire caught his breath. Another man, near, held the burning man down, and poured water quickly into his mouth, by which the flame was put out, and no great harm was done. I did not hear of this escapade myself while in the district, but I have no reason to doubt its truth.

Helena. What an awful accident; it makes me shudder.

Juridicus. It reminds me of the examples of so-called spontaneous combustion. In them it is believed that it is the vapor of alcohol which takes fire first in the breath.

Physicus. That is the theory of those who believe in spontaneous combustion. In the case of ether vapor taking fire in the breath, the results are perhaps more alarming than real. A medical friend of mine, who was using ether spray to extract a tooth, late at night, unwittingly brought a lighted candle to the mouth of his patient to examine if he had removed the whole of the offending molar. To his dismay, as the patient exhaled a breath of air, charged with vapor of ether from the lungs, the vapor caught fire. By prompt attention serious injury was prevented, but great alarm and some slight blistering of the lips were experienced by the sufferer.

Juridicus. I gather from your account that, taken as a whole, the symptoms of intoxication caused by ether-drinking are identical with those produced by alcohol, but are of shorter duration.

Physicus. From the flushing and surface warmth of the first stage of intoxication to the pallor and surface coldness of the last stage, all are the same. Ether, in fact, produces a short, sharp, and intense drunkenness, so sharp that the four stages, when they are developed, can hardly be individualized, and are so brief that recovery is all but immediate. Whatever luxurious advantage ether may have over alcohol as an intoxicant, is expressed best by saying that under it a man may get intoxicated and sober some half dozen times in the twenty-four hours, and may start off again for the next twenty-four hours, suffering less than he would suffer from one intoxication induced by alcohol.

Helena. Still it seems to me that the action of ether on the animal body is little less deplorable than the action of alcohol, and that for the benefit of the sufferers from ether-drinking the practice ought to be put down with a firm hand.

Physicus. I should quite agree as to the suppression of the practice as quickly and as efficiently as is possible ; but I am bound, at the same time, to state the truth, that ether intoxication is less injurious socially, morally, and physically than alcoholic.

Juridicus. In what respects do you see the evils less ?

Physicus. In many. In the first place, the ether-drinker, as he comes more readily under the influence of his indulgence, is the sooner rendered incapable of continuing the indulgence. He, usually, falls before he is hurt, and before he has much time to hurt others.

Juridicus. That is to say, he may become a savage, but he does not become a sot existing for hours at a time, or even days, a useless, morose dog, unable to help himself, and determined to help no one else, however rightfully they may claim his assistance.

Physicus. Neither while he is a savage does he retain for any long period the power of doing mischief. His

violence of temper is brief, and is mingled with outbursts of crying or laughing, like the wildness of the hysterical, rather than the ferocity of the mad. Indeed, the intoxication produced by ether is to alcoholic intoxication what the hysterical representations of some diseases are to the same diseases in reality. The fury of the ether aberration is therefore fitful, and, better still, it is short.

Helena. It is a volatile fury, volatile as the agent which produces it.

Physicus. It is just that. A man raging from strong and fiery alcoholic drink wanders about, often for hours, exercising a kind of reasoning unreason, irresponsible in what he does as a whole, yet with flashes of directing reason which lead him to carry out evil acts and purposes with a design, skill, and intention, which to the bystander may look in every particular like intelligent purpose. He is really doing without being himself fairly conscious of the fact, acts which, when he has become sober, he has utterly and absolutely forgotten, if it can be truly said that what he did was ever implanted on his memory. For a moment the ether drunkard may imitate the alcoholic in some of these respects, but it is only for a moment. Before he has time to plan and carry out his insensible scheme he is liberated from the devil that possesses him, or at the worst falls, for a season, into complete insensibility, harmless, unconscious, and ready soon to return to the realities of life, sober and in his right mind.

Juridicus. What you have said about the state of mind of the alcoholic drunkard interests me intensely, and leads me, though we are truly wandering from where we set out, to ask whether, under the influence of ether intoxication, many crimes of violence, extreme, and prolonged, and plotted, are carried out?

Physicus. I could hear of none such. I heard of blows being struck during the short fury, and of foolish things

that were half said and done; but the description was tempered by the explanation that under excitement from ether there was not time for continued violence, nor for the carrying out of plotted designs of evil.

Juridicus. That experience tallies pretty closely, I presume, with what you have learned in observing the effects of the administration of ether vapor on man?

Physicus. It does. When ether was originally introduced as an anæsthetic, and the medical students—to the great body of which much-maligned class I had then the honor to belong—were busy making experiments of administration on themselves, many amusing short fights and struggles occurred.

Juridicus. If my memory be right, the same scenes were not altogether confined to the students.

Physicus. Your memory is quite right. A grave assembly of learned doctors once met, with one of the gravest of its grave in the chair, and even that assembly lost its equanimity.

Helena. How did that happen?

Physicus. An American student, short, powerful, and excitable, who was made the subject of experiment of ether intoxication, rose during the stage of his excitement, and burst from his captors. Then, after giving the prevailing student views as to the various professional and moral qualities of his teachers, with an eloquence remarkable for its passion, and a candor equally remarkable for its perfection, he finished off by going up to the grave and astounded President to astound him still more by a deliberate double box on the ears, which for many a long day was solemnly remembered.

Helena. And did it all end there?

Physicus. His passion did. In fact, the excitement was over in minutes as compared with hours, if alcohol had been the cause of it.

Juridicus. And what do you imagine is the dream of the ether-drinker under his excitement as compared with that of the man under alcohol?

Physicus. As a rule, the dream of the ether-drinker, while he is under the spell of his enchantress, is far more refined and light than the dream of the alcoholic, as it is usually described by those who have felt both.

Juridicus. To all of which must be added the pleasure of getting so delicious a dream at so cheap a rate. A luxurious intoxication for threepence is not to be sneezed at by connoisseurs in such exercises.

Physicus. The ether-drinker might also claim an important advantage over the alcoholic in relation to ultimate as well as to present effects; if he had the knowledge to reason on his side of the question, and cared philosophically to defend his particular gratification.

Helena. What is that advantage? We shall soon have to vote, if we progress in this strain, on the question of Ether *versus* Alcohol.

Juridicus. I anticipate that the advantage which is coming relates to the less injurious effects of ether on the constitution of the body.

Physicus. An excellent guess. I was about to observe that those who indulge in alcoholic drinks quickly and certainly attain one or other stage of the "alcoholic constitution." They may call themselves moderate drinkers, but so soon as ever they begin to feel that alcohol is a necessity, and that they cannot abandon it without a struggle, they are under its ban, and are to some extent physically injured by it. Their blood-vessels are easily congested, their digestion is readily deranged, their spirits are quickly depressed, their muscular power is very soon prostrated. They grow, almost without exception, prematurely old, dying, as we have seen, in the early years of the third term of life—that is to say, soon after sixty—from Bright's dis-

ease, heart disease, lung disease, brain disease, or from some other of the degenerations of the vital tissues, which in healthier persons need not appear until the closing part of the third term—that is to say, until between eighty and ninety years.

Helena. And are ether-drinkers exempt from all these evils?

Physicus. If they are not absolutely exempt from them all, they are not subjected to the same strain. Mr. Draper reports that he has heard of some whose minds have become affected under ether, after long and free indulgence in it. He also refers to an example of supposed loss of sight from the same cause. I am unable to confirm these rumors. I do not think any one could have a better authority on the subject than I was favored with; and the testimony I received, drawn from a skilled experience and observation of twenty-five years, was to the effect that in the ether-drinking districts the dangers induced by ether are invariably the dangers incident to a sudden overdose of the agent.

Juridicus. And the special organic diseases of the body which so systematically follow upon the continued taking of alcohol—such as gout, fatty degeneration, liver disease, heart disease, kidney disease, brain disease, the different kinds of paralysis—these, and other conditions of disease to which you have referred, different as affecting different organs, but similar in respect to primary modification of vital function and all inducible from alcohol, are they not induced by ether?

Physicus. Some few ether-drinkers are affected by these diseases as if they derived them from the practice of indulging in that fluid; but, on inquiry, it is always found that the indulgence in ether, in these examples, is combined with indulgence also in some form of alcoholic drink, usually whisky.

Helena. Are there, then, no physical evils from ether-drinking—really no diseases at all?

Physicus. The worst physical evils which seem to attend indulgence in ether-drinking are dyspepsia and excitability of mind, producing, in combination, a condition closely resembling true hysteria. When the short intoxication from ether is over, the person who has suffered from it is subject to flatulency, dyspepsia, and inactivity, and to hysterical disturbances, for which the remedy, too frequently sought, is recurrence to the cause of the distress. The craving for the ether drink, which is soon pronounced, is in this way much intensified.

Helena. How do you account for such very wide differences of effects between alcohol and ether.

Physicus. It is fully explained by the physical readings of the actions of alcohol and ether, and is confirmed by them to the letter. A liquid so comparatively insoluble in the blood and other animal fluids as ether is, is comparatively negative in its action on them. It enters into no durable physical combination with any part or structure; it undergoes no chemical decomposition in the body; volatile as well as insoluble, it is easily liberated from the body, and after a short time it leaves the body without inflicting anything more than functional disturbance. It sometimes disturbs the stomach, and it excites the hysterical condition of which I have spoken. There its evils end, when it does not actually destroy.

Juridicus. The revenue officers and their Principal, the Chancellor of the Exchequer, will not thank you, Physicus, for that opinion. You set up Prince Ether over King Alcohol.

Physicus. Taking it all in all, the history of the ether-drinker compares favorably with that of the alcoholic; but we are so accustomed to witness the action of alcohol in our daily life; we see so many thousands making the

physiological experiment of its use ; we hear so constantly the story of its effects ; we have grown up so familiar with the praise of its virtues, and so callous, if not ignorant, of the reality of its vices ; we are so imbued with the idea of its necessity, and are so ignorant of the fact of its being no necessity at all, until it makes the necessity for itself ; we are so impressed with the favored protection it affords, and so blinded to the open secret of the incalculable danger it is ever imposing on the world ; we are so disposed, I say, toward alcohol in all these points, that when we hear of a practice of indulgence in some new intoxicant, we are led to pity the wretches who are so deluded as to resort to that which seems so unnatural.

Helena. I doubt not most alcohol tasters will pity and criticise the ether-drinkers of the north of Ireland, and will feel that the good priests of those parts are performing a noble work in their incessant endeavors to exclude the ether bottle from their parishes.

Physicus. With that sentiment I most cordially concur, and I rejoice to hear and to know that the efforts of the priests are being successfully rewarded. If, however, by these efforts the whisky bottle begins again to replace the ether bottle ; if, instead of indulging in the light delirium of ether, the converts to abstinence from ether are to resort to the heavy delirium of alcohol ; then, the conversion will be simply from one evil to another that is greater and more inflicting, in its sins and penalties, both to the individual and to the community.

Juridicus. You think that, in proportion to the physiological wrong done by the agent used, the physical and the moral wrongs will multiply and increase.

Physicus. I do. But let not this view be accepted as an apology for ether-drinking or as an excuse for it. It is a bad practice, though there may be others that are worse. The ether-drinker is an unnatural being, incapable of per-

fect trust, and, in so far as his indulgence is gratified, is demoralized. He also is exposed to personal danger. The overdose that proves fatal is easily overdrawn; and if he were to become the representative of the millions of society, the number of sudden deaths from ether would be greater than now occurs from alcohol, although the general mortality would probably be much reduced.

Juridicus. Frankly, I think you have proved your case for ether, and, by a side issue, we have gained much useful information on the action of stimulants and narcotics as a class, which information expands our view of the whole subject in hand, in its social as well as in its scientific aspects.

Helena. No doubt. But I ask, practically knowing so much, to what object should the true reformer first direct his labors?

Physicus. The grand object of the true reformer should be to suppress, with equal promptitude and decision, all sources of physiological wrong; the lighter as well as the heavier; the whisky bottle, ether bottle, and all other similar bottles that lead to similar mental and physical inaptitudes for moral and healthy life.

DIALOGUE X.

CRAVING CONSIDERED AS AN ABERRATION—ALCOHOL FOREIGN TO LIVING ACTION—AN INTOXICATED ENGINE—ALCOHOLIC EXCITEMENT POOR IN COMPARISON WITH SOME OTHER EXCITEMENTS—LIFE UNDER NITROUS OXIDE—LIFE UNDER HASCHISH—THE MORAL.

Juridicus. In the morning we were listening to your description, **Physicus**, of the ether-drinking community, and, as a narrative, it interested us extremely. I have been thinking over it in the course of the day, in order to draw the moral from it which you wished to impress. In so thinking, it has occurred to my mind that after all is said, this ether-drinking may be but one more example of the fulfilment of a natural desire. What say you to that?

Physicus. I should say that if the desire were really a natural act, "the interpretation of an instinct," natural law in this matter is an exceptionally confused and contradictory law, something nearer human invention than anything else that can be found in other parts of the domain of nature. If it be natural to crave for these things, why does not the craving begin before the things are known to the craver, and why should the craving be extended toward substances which none but persons advanced in knowledge could ever possess? The craving after ether, for example, when it has once been excited, may be as urgent in an illiterate peasant who does not even know that there is such a science as chemistry, as it would be in a learned chemist who knows that, in order to produce ether, there must first be produced an alcohol, a strong

acid, and an elaborate apparatus, the whole requiring some centuries of research between the craving and the realization of it. Nay, the craving, when it has been excited, may be as urgent in a lower animal, which never could invent the satisfactory agent at all, as in the illiterate peasant or the wise philosopher.

Helena. It seems clear that things which are necessities are provided at once. Take, for example, milk, which is ready for the use of all animals that live upon it, and which is constructed to supply every possible want. It has always appeared to me that philosophers who have discussed the question of design in nature, have never sufficiently considered this one simple instance of what seems to be design in its perfection.

Physicus. I agree with you. All things that are truly natural are naturally provided, and there is not a single natural necessity that is not naturally and bountifully supplied. Water is supplied, air is supplied, food is supplied. We can modify all these, and create a craving for the modification. We can modify the air, so that what we breathe produces a different mode of existence, and for that very modification we can create such a craving that the greatest of philosophers and the poorest of lower animals may long for the new life, and feel such an irresistible desire to breathe the new life that whenever the mere means for accomplishing that desire is suggested, even by the sight of the means, the desire is all aglow. To my mind the evidence is conclusive, that this craving is the natural sign, whenever it is indicated, of aberration from nature; that the craving has no connection with the truly natural life, but is the interpretation of a morbid habit acquired by man out of his own inventions; that it is communicable by man to other men, and even to animals lower than himself; that it is incomparable with the diviner schemes which he did not invent, and is as far apart from them and out of har-

mony with them as it is from his good, and out of harmony with it.

Juridicus. According to that rule, whoever craves beyond his wants is aberrant, and whoever makes his craving the object of his life is mad, and no longer in the ranks of "the survivals of the fittest."

Helena. In fine, to crave at all is to pray for death.

Physicus. The history of ether-drinking which I have narrated is in point. It is, as you say, a singular phase of social life in this century, and, as such, is worthy of record. It is still more worthy of record as a study of life under aberration; of the extent to which man can indulge in the freedom of his own inventions; of the desires he can feed on his own inventions, and of the end and result of the feeding. It, with much more that is akin to it, tells us that, safe as we are when we are running in concert with nature, we are soon stopped when we try to go our own way; that so soon as we strive to make a nature of our own, or to alter the bases of nature, so soon are we landed in the impossible; that if we try to make no more than change of dreams, fascinating as may be the charm, we must, in the process, either become unintelligible the one to the other, or sink into the universal silence.

Juridicus. That is an old story. It is a story often told, and day by day illustrated. Yet never was it so well told, after all, as in the oldest of the old chronicles respecting those wise and powerful men who, in the vanity of their desires, said: "Go to, let us build us a city and tower whose top may reach unto heaven."

Physicus. Aye, truly! and who tried the experiment. I thank thee, O mine adversary! for that illustration.

Helena. I am obliged to think with Physicus, that if these desires for what are such extraneous things had formed a part of the scheme of the living creation, the things would not have been made so foreign to us; that

they would not always have been things humanly invented, and that we should have found them constructed without the invention of man.

Juridicus. That suggests another question. Is it the fact that in the natural construction of the varied forms of life there is really no employment—if I may with reverence make use of such a term—of any agent that acts like alcohol or other of these intoxicating fluids?

Physicus. I have asked that question over and over again, and the answer is ever the same—there is nothing of the kind. All vegetable life, all animal life, lives, develops, flourishes, passes through its various stages, and dies without a shade of a natural provision for alcohols, or such intoxicating agents as necessary parts of their existence. All living creation is a vast water engine in a purely physical point of view, and nothing else.

Helena. And if that be so, then to interpose the use of any other agent is to interfere with the machine, and reduce the life-value of its individual parts.

Physicus. That is true. All such introductions, if for the moment they quicken the action, hasten the processes of life, and shorten the duration.

Juridicus. You remind me of an experiment which one of our boys once tried, to his sad discomfort and grief. A mechanical friend made the boy a beautiful little model steam engine, which worked by the heat of a spirit lamp. One day a comrade who was very ingenious, in mischief, came to see the engine at work, and, full of fun, proposed, as it was Christmas time, to feed the engine with some of the spirit intended for the Christmas pudding. The idea was too good to be lost, so the boys mixed a dose of spirit with the water that was put in the boiler of the engine, and then heated the boiler. In quick time the engine was off “like mad”; and though the action was soon over, it was great fun, they said, to see the little engine so very drunk.

Alas for the fun! As their progress made them bolder, they soon put in a "leetle drop" too much, and the fine engine blew up with a vengeance, and was rendered utterly useless.

Physicus. Why did you not say "drunk and incapable"?

Juridicus. I might have said more than that; I might have said—"dead by drink."

Physicus. A better illustration of the danger of interfering with fixed processes, and of the difficulty of carrying out moderation could not have been offered. The analogy is very perfect. If men began to tamper with steam engines as they do with their own bodies, you would soon have so mad a traffic that I doubt, Juridicus, if even you would venture your life on the rail.

Juridicus. It may be so. I certainly should not like to ride behind a driver of a "Flying Scotchman" who had liberty to treat his engine with its due relative potation of strong drink every time he treated himself with the same refreshment. We will give you the argument so far, Physicus. As an actual necessity neither alcohol nor anything of its kind is wanted for life. We will even admit that the lower animals do not want anything of the kind. What we hesitate to admit is that man, with his exceeding wants, and with his reason, not only to invent, but to govern his delights, may not demand these agencies as he passes from the lower to the higher intellectual life.

Physicus. Stay, stay. Why, two days ago the argument for these things was that no man was so savage, was so low, was so near the animal creation, but that he was driven to find these things in order to gratify his instinctive desires.

Juridicus. Save and except your friend, the New Zealander.

Physicus. Whom I am quite willing to accept as the

most intelligent of aboriginals, and admirably selected in opposition to your cause. I can understand a savage taking these things in his ignorance, just as I can understand a child who has never seen a fire putting its finger into the bright blaze. But, for the life of me, I cannot understand an intelligent man, who knows and sees all the dangers incident to a foolish and unnatural experiment, making the experiment on his own person.

Juridicus. If it affords him a pleasure, why not?

Physicus. If that be the argument, then let him seek for pleasure in the highest development of it, not in the lowest and most dangerous. Do at least be reasonable in seeking for pleasures.

Juridicus. Where can you find him a finer pleasure than in enjoying the excitement from good wine? Wine that maketh glad the heart of man?

Physicus. In many things. There are agents that produce a new form of life, before which merrymaking under wine is a miserable and misery-making excitement.

Helena. The ether-drinkers might, perhaps, put in their claim.

Physicus. They might, but it would be poor compared with some others. You should read the description by Sir Humphrey Davy of the excitement from nitrous oxide.

Helena. Do you remember his description?

Physicus. Perfectly. After leaving a "box" in which he had been breathing the gas, he began to respire twenty quarts of the pure gas, and, thereupon, the change of life began. He felt a sense of tangible extension in every limb, his visible impressions were dazzling and apparently magnified, he heard distinctly every sound in the room, and was perfectly aware of his situation. By degrees as the pleasurable sensations increased he lost all connection with external things; trains of vivid visible images rapidly passed through his mind, and were connected with words in such

a manner as to produce perceptions perfectly novel. He existed in a world of newly connected and newly modified ideas; he theorized and he imagined that he had made discoveries. When he was awakened from this semi-delirious trance by his friend, Dr. Kinglake, who took the inhaling bag from his mouth, indignation and pride were the first feelings produced by the sight of the persons about him. His emotions were enthusiastic and sublime, and for a moment he walked round the room perfectly regardless of what was said to him. As he recovered his former state of mind he felt an inclination to communicate the discoveries he had made during the experiment. He endeavored to recall the ideas, but they were feeble and indistinct. One collection of terms, however, presented itself, and with the most intense belief and prophetic manner he exclaimed to Dr. Kinglake, "Nothing exists but thoughts; the universe is composed of impressions, ideas, pleasures, and pains."

Juridicus. Yes, that was a dream worth realizing once in a way.

Physicus. About as frequently as you would go up in a balloon.

Juridicus. It is a wonderful vision. I have heard one of the most eloquent and learned of Q. C.'s, who ought long ago to have been on the Bench, recite a poem on that vision with an energy that transports you into it.

Physicus. I have heard him also. It is very fine.

Helena. I believe you, too, Physicus, have, in experiment, experienced similar visions?

Physicus. I did once experience something quite similar, when I was making a new research with pure methylic ether.

Helena. The pure ether obtained as a gas from the lightest of the alcohols?

Physicus. The same. In order to test if the gas were

an anæsthetic, and of what kind, I inhaled it to all but complete insensibility in the presence of a professional friend, and as I came under the influence I felt much the same as was described respecting Davy. It seemed to me that the space of the small room in which I sat was extended into a space that could not be measured, and yet could be grasped and threaded ; as if, in fact, my faculties, mental and physical, adapted themselves for the time to the vastness of the space. It seemed to me that every sense was exalted in perceptive appreciation. The light was brilliant beyond expression, yet not oppressive ; the ticking of a clock was like a musical clang from a cymbal, with an echo ; things touched felt as if some interposing gentle current existed between them and the fingers. When the inhalation ceased—at my own instance, for, as my friend told me, I was sufficiently conscious to know when I had breathed long enough—the return to the natural state of existence was imperceptibly rapid. As in a dissolving view, I seemed to pass from one state into another by solution of states, the shadowy past gradually fading away into the reality of the present, so that for an instant I had to ask which was real and which was unreal, until the mind was steadied and once again fixed in its old abode.

Juridicus. It was a remarkable series of mental changes.

Physicus. They who have felt these changes, who have lived, as it were, in another life, however transitorily, are easily led to declare with Davy, that “ nothing exists but thoughts ! ” That “ the universe is composed of impressions, ideas, pleasures, and pains.” I believe it is so, and that we might by scientific art—for there is such an art—learn to live altogether in a new sphere of impressions, ideas, pleasures, and pains, from that in which we now live. But stay, I am anticipating, unconsciously, what else is in my mind. The rest is silence. I must return to the world we all know.

Helena. I should rather like to hear a little more of these unknown worlds of thought. Has no one else described similar visions?

Physicus. Yes; the eminent physician and philosopher of Milan, Professor Polli, has given us a similar account, perhaps even more remarkable, in relation to the action of Haschish on the body.

Juridicus. Before you go on I must look up the fathers. Haschish is the same as the *Nepenthes* of Homer, is it not?

Physicus. Probably. It is the active principle derived from the flowering extremities of that variety of hemp called *Cannabis Indica*.

Helena. Is it a seed?

Physicus. The active principle is fixed in a resin called *Cannabina* or *Haschashina*.

Helena. There is no such resin in our hemp?

Physicus. The resin is not met with in hems that are indigenous to cold or even temperate climes.

Helena. It is then the resin that is used?

Physicus. Not quite; the Haschish as it comes from the East prepared for the use of the Haschish-eater, does not represent the pure resin; it is in cylindrical or candle-shaped pieces, from three to four inches long and the eighth of an inch in diameter. The sticks are pointed, and are of a brown, almost black, color. The material has the characters, when powdered, of a dry extract which softens readily under the influence of heat, and may be easily moulded by the fingers into the form above described.

Juridicus. Has it any taste?

Physicus. To the taste it is sharp, and as it is commonly employed in the East, it is either smoked with tobacco, or is taken by the mouth. In Damascus it seems principally to be taken by the mouth. Haschish smokes with some difficulty alone, requiring the constant applica-

tion of the torch. When it is eaten it is sometimes mixed with honey or taken in coffee. There is also a fatty and aromatized extract of Haschish prepared for those who choose to chew it. Again, Haschish is smoked in the crude form in which it comes from nature—viz., as the simple flower and seed.

Juridicus. That is how the Scythians took it, if we may credit Herodotus.

Physicus. Herodotus may usually be credited, and never more than in this matter. The Scythians inhaled the smoke of the flower and seed of the *Cannabis* from a rude fire with a tent over it. Some still inhale the smoke of the seed. Others make an infusion of the seeds and flowers.

Helena. As we make tea, I suppose, and drink the infusion, with the same accompanying comments on neighbors and friends.

Juridicus. I hope not. What would scandal become over a Haschish table?

Physicus. Or over a Haschish spirit table, for there is yet another form of it. It is made sometimes into a kind of poteen, by steeping the fresh plant in spirit.

Helena. And did the learned Italian professor put to the test, on himself, the properties of the Haschish with or without the spirit?

Physicus. Without the spirit. He had heard very varying reports as to the action, so he determined to exclude all possible sources of error. He made up his mind to take the Haschish in doses verging upon the poisonous; and that no mistake might arise in respect to the effects produced, he associated with himself, as experimentalists, Dr. Vincenzo Rosa and Signor Emilio Sinistri. The specimen of Haschish used had been brought by Rosa from Damascus. It was in candle-shaped sticks, as already described in speaking of the varieties.

Juridicus. Did they all make themselves subjects of experiment?

Physicus. They did. They met on the 14th of November, 1859. They commenced by each one taking half a gramme (7.7 grains) of the extract. Half an hour having passed without any perceptible result, a second dose was taken in the same manner, except that a cup of coffee was allowed to follow the administration; no effect following this, a third dose was taken after a lapse of a few minutes, and a fourth dose of the same size having been mixed with some Hungarian tobacco, not very strong, was smoked from a pipe. They were near the end of their pipes, or rather of the Haschish and the tobacco, and still no effect, when one of them began to jest with much obstinacy of demeanor about certain French words, and also to rattle his spoon in his coffee-cup, in a way that indicated some advance in intoxication. His companions, meanwhile sitting on their divan, were calm and thoughtful, giving no external signs of an effect, although they afterward acknowledged that they felt some slight mental confusion. This confusion continued, and the effect of the narcotic was well marked in all three about one hour and a half after the reception of the first dose.

Juridicus. It is well to know whether these gentlemen were of similar or of different temperaments, characters of mind, and habits.

Physicus. That is a wise observation, and Professor Polli has anticipated it. He specially records that the temperaments of the three experimentalists were very different. One was of a sanguine, the other of a nervous, the third of a lymphatic, temperament. Their modes of life were likewise different. One was accustomed to stimulants, to tobacco, to the taking of a free quantity of food, and indeed to good fare altogether; another was accustomed to stimulants and to tobacco, but always ate sparingly; the third used tobacco, but rarely took stimulants, and always ate very sparingly.

Juridicus. And their occupations, were those also varied?

Physicus. Their occupations were equally different. One was a doctor, another a lawyer, a third a man of letters.

Juridicus. Were they all affected similarly?

Physicus. They were. The symptoms of inebriation from the Haschish once pronounced, developed with great rapidity in them all. Their first sensations were those of intense astonishment at the circumstances that they found themselves no longer masters of their own acts, while they still remained lucid witnesses of all acts, however foolish. Here the difference between alcoholic inebriation and inebriation from Haschish is strongly marked. They saw themselves committing absurdities of the most grotesque kind; leaping, beating time to nothing, moving their arms as if receiving electrical shocks, writing ridiculous words, and so forth, without any power on their part to prevent such exhibitions, but yet standing, as it were, independent of them, as though they were merely subjects of observation exhibited from other persons than themselves. At first they had the sensation and appearance of feigning a state of exaltation which they did not feel, and which was even feigned with so much uncertainty and awkwardness that any one not aiding in it would, for a long time, believe in its unreality. It was, nevertheless, an irresistible propensity.

Helena. Were they able to define and recollect the sensations they felt?

Physicus. They all record that the sensations by which these effects are attended are very difficult to describe by the experimentalist, and are the more profoundly difficult in proportion as he himself is conscious of them. Nevertheless, the sensations are singular and laughable. To feel, says Dr. Polli, one's own identity changed, or, it were

better to say, divided ; to feel one part preserving its integrity, while the other plays the fool ; to find one's self strongly disapproving of the acts of a neighbor under the same influence, and while acutely perceiving the folly of his proceedings, to be unable to refrain from entering into his whim, is a mental phase full of interest.

Juridicus. It strikes me, most learned Professor, I have seen a great many in that predicament.

Physicus. I knew you would make that reflection. But let me continue. Polli adds that the sense of division of identity seems the effect of two successive and alternate states of mind. At one moment the intellect is obscure, and loses itself in forgetfulness of the past ; then it returns clear, and is able to form a judgment for a moment, and to disapprove of any acts it may have before sanctioned, but only to be again involved in that state of automatic folly which is so peculiar a phenomenon during Haschish intoxication. During the intervals of confusion or darkness, the lucid moments possess a power and comprehension truly marvellous ; so that in a few seconds the most distinct and accurate picture of a range of life, including as much as forty years, may be recast and surveyed. The alternation from obscurity to lucidity is like the effect of a sea wave ; a lucid wave is followed by a dark overhanging wave, on which the mind is shipwrecked and carried, with the sensation of a melancholy floating, toward forgetfulness and oblivion, to be roused instantly by the passage over it once more of the wave of life and light. The dark waves chase each other so long as they continue, and as the mind, unable to maintain its thoughts and acts, is bending under a successive series of impressions, the shortest space of time seems to present the duration of an eternity.

Helena. The effect is something like that which you have described as produced by methylic ether.

Physicus. It is similar, but the action is in flashes, as it

were, not in one steady line or current of thought. For these peculiar alternations of lucidity and melancholy, which mark the first stages of Haschish intoxication, Dr. Polli offers a very curious and interesting interpretation. He thinks that from the first taking of the drug, small portions of it are absorbed and enter the circulation without interruption. The blood then carries a small wave of the poison to the brain, upon which occurs that state of obscurity which he has described. But the column of blood charged with the poison, passing on through the brain, is succeeded by a column of pure blood, upon which the interval of lucidity is presented. The extremes of effects are thus the results of extremes of contrast. The lucidity experienced is the same in kind, though infinitely more intense in degree, to that which obtains when one is suddenly roused from sleep to the light of a sunny day.

Juridicus. Upon my word, you vital physicists revel in wonders. If you would only show us how to infuse something of the kind into the science and practice of the law, you would make a lawyer's life endurable. Has the learned Italian—to whom I really must get you to introduce me when I go to Milan—any theory as to the cause of the idea of the ages of time through which he seemed to pass?

Physicus. That seeming extraordinary passage of time which struck the observers in so singular a manner, and made them so impatient of delay that they were continually recurring to their watches and observing, with a kind of awe, how minutes were transformed into great epochs, is explained by Dr. Polli as due to the rapid and varied succession of the numerous ideas which passed through the mind. No more evident proof could be adduced to show how the mind measures time solely by the succession of impressions made upon it; and how a few moments in a life full of sensation, may be equal in realization to many years of a life addicted to monotony or monotonous labor.

Juridicus. A very fine conception, original, simple, and common-sense. But I interrupt you; you were about to state some other fact.

Physicus. I was about to say, that with this apparently interminable length of time, under the influence of Haschish, there seemed to occur a kind of forgetfulness by which acts of the mind taking place an interval before, or impressions received some time before, were in a manner forgotten. But in a few brief moments they returned or presented themselves, as it were, for the first time, and in such a manner—almost inexplicably—repeated themselves, that they reproduced frequently, as new, the impressions they re-inspired.

Juridicus. So far you have told of the mental condition induced from what may be called the reasoning side of the experimentalists. What was the sensation as to their moral condition, or did that remain *in statu quo*?

Physicus. I am coming to that. There was a singular condition excited, by the narcotic, in our experimentalists in the way of a moral phenomenon. The influence of the drug showed itself in that respect in exciting in the observers—so different themselves ordinarily in general character and temperament—a common docility and absence of susceptibility which was most remarkable. Thus one of them gave to another, with whom he was but slightly acquainted, a series of hard blows on the back, saying that he himself felt nothing of the effect of the Haschish, and asking whether the blows which he inflicted were felt. On his part, he who received the blows took them all in good humor, uttering no complaint, and seeming, indeed, insusceptible of complaint. Again, one of them who sat writing, submitted to receive the infliction of two sharp boxes on the ears, and to have his pen snatched out of his hand, without any expression of pain or even of annoyance. Reproaches between themselves for having

taken the drug never passed in the lucid intervals. Such was the good humor that prevailed, that each one mutually yielded up his own will and obeyed the other. The trio joyfully concurring in all that suggested itself to them, as withdrawing them from the idea of danger, and fully agreeing, in particulars, as to the sensations they experienced.

Helena. This is the story of the Old Man of the Mountain over again in scientific habiliments.

Physicus. That is what Dr. Polli himself says. The secret of the magical influence which the Old Man of the Mountain is said to have exerted over his followers, to whom he drank in Haschish, seemed fully and personally explained to him.

Helena. I hope the experimentalists all recovered without injury.

Physicus. They did, but not for a great many hours, during which they felt many continued visions, too long to remember in detail.

Juridicus. I am sure we have heard the narrative with great instruction and pleasure ; and though it has led us a little aside, it has given a seasonable variety to our argument. We were led to these descriptions by your statement, Physicus, that the visions of wine were contemptible by the side of the visions which could be obtained by more refined intoxicants. Do you, therefore, seriously wish us all to give up wine for the purpose of substituting these perfected exalters of this very commonplace existence ?

Physicus. Far be it from me to teach that doctrine, my skillful friend, as you know. I use the facts only to meet your suggestion, that for the finer minds some form of nervous stimulant is required to make them the finest. To that suggestion I merely reply, that if it be sound—which I hold it not to be—then let so gross and common and

sickening a thing as alcohol give way to more perfect and refined agencies. If you must indulge in supernatural visions, let them be worthy of your metal. For the kirk-yard, dirty road, tailles mare and foul witches of Tam o' Shanter, possess yourself of illimitable space, boundless time, and dreams of wonder which are worthy of remembrance.

Helena. In other words, if your life must be diversified by visions called up by your own acts, let it be transported into a palace, not condemned to a cellar.

Physicus. You are an ally I have long wanted. Let Juridicus beware!

Juridicus. The Court forthwith adjourns for luncheon, *sine vino*.

DIALOGUE XI.

THE REGISTRAR-GENERAL'S THIRTY-NINTH REPORT FOR ENGLAND—THE APPENDIX ON ALCOHOL—APOLOGIES FOR ALCOHOL—MORTALITY FROM ALCOHOL—MORTALITY OF PUBLICANS AND GROCERS—ALCOHOL COMPARED WITH MEDICINAL AND POISONOUS AGENTS—FALLACY OF PERSONAL EXPERIENCE IN USE OF ALCOHOL—INCONSISTENCIES OF KNOWLEDGE AND PRACTICE—A CASE IN POINT.

Physicus. I see, Juridicus, that although your residence here is temporary, you are obliged to carry out your old taste of having a library at hand.

Juridicus. I was fortunate this time in obtaining, for a short season, a house which was furnished with a fair library. Our landlord is a member of Parliament, and furnishes his library as a literary workshop during the recess.

Physicus. I wondered at such rows of blue books, such volumes of Hansard, and such a thoroughly thumbed *Annual Register*. This is a Member who works as well as speaks.

Helena. He rarely speaks, but when he does, it is to the point.

Juridicus. And he is positively fond of blue books.

Physicus. So am I. To me the obtaining of a blue book is always a pleasure as well as an instruction. Some of the best and some of the most interesting of instruction is to be found in the blue books, despised though they are by the easy reading public.

Juridicus. I dare say; and your fascinating studies, my dear friend, require a little prosiness to make them digesti-

ble. My studies, on the other hand, are so prosy they require a full dose of light literature, often repeated, to make them endurable.

Physicus. Then your landlord's library of blue books is thrown away on you. I warrant me, if he knew, he would wish that he had met with a man of less refined taste for his tenant.

Juridicus. Nay, the books are not altogether thrown away, blue as they are; and, by-the-by, here is one of them which I have just been reading with some interest, because it concerns you and the subject on which we have held so many dialogues.

Physicus. What book is it?

Juridicus. The Thirty-ninth Annual Report of the Registrar-General for England.

Physicus. Including Dr. Farr's appendix and remarks on alcohol?

Juridicus. Yes; and I think there are some hard nuts there for you to crack, my friend.

Physicus. Whatever Dr. William Farr says, I always listen to with the respect that is due to one who is a master spirit of the time. But in this matter he is led away by old prejudices, tintured by arguments and impressions which have been derived from old readings, and which are, in fact, vain repetitions.

Helena. That is the idea the appendix conveyed to me. Many of the arguments are of a kind I could have answered myself. Others of them have been answered time out of mind.

Juridicus. Nevertheless, the appendix furbishes up old men like me, who, in spite of your teachings, Physicus, have still got in their minds, and hearts too, that wine is a goddess—

“And sometimes very good company”:

—furbishes us up, I say, with a good many reasons which,

to those who are inclined to the same views, are mightily convincing. I enjoy the appendix, for the fact that it shows the heartiness of the writer, rather than of the controversialist, in the cause he advocates.

Physicus. It is a document that opens the way for much useful and thoughtful consideration; and as it is written by an author whose mind is tempered by desire to speak in a moderate and scholarly tone, and who, even in his appreciation of the enemy, is most careful to warn every one against the devices of the enemy, we must receive it with respect.

Helena. You defend the article with more consideration than I expected, or than, I think, it warrants. It is to my mind inconsistent in its argument. It praises wine-drinking, and even heavy drinking for what it has done in raising the wit of the world, and then tells us, "for the bottle of past times put glasses, and you will probably be right; but the true standard is learned by a watchful experience." Again, it conveys that alcohol is a food, classes it amongst foods as one of the most important, and then shows us, chapter and verse, that they who become most familiar with this food die most rapidly.

Juridicus. Oh, I think it is very candid about the harm that is done. Take, for example, the remarkable fact demonstrated, that the mortality of grocers, after they had commenced to sell wines and spirits in 1871, was much higher at every age of life than it was in 1861, before they had commenced that business. Here cause and effect are traced in the most perfect manner, and the cause is shown to be alcohol, without a moment of hesitation.

Physicus. These are the inconsistencies against which Helena, I presume, protests.

Helena. I protest further than that. The paper conveys to the minds of those who do not read it with the most scrupulous care, the notion that the deaths by alco-

holism are only one hundred and sixty-four in the year, in the Metropolitan district, while from the contagious diseases they are eighteen thousand, and from all diseases eighty-nine thousand seven hundred and forty-one. In this small ratio alcohol is set up as a destroyer in comparison, with the zymotic diseases and with deaths from all causes.

Physicus. The author, in naming one hundred and sixty-four deaths, refers to those which actually occurred from the immediate and direct effects of alcohol.

Helena. I am aware of that; but the letter conveys that the mortality from alcoholism bears the unimportant proportion named. The figures were actually adduced at table the other night in proof of this, and the harmlessness of drink was argued from it by a miserable woman who has one foot in the wine-barrel and another in the grave.

Juridicus. The statement does require further exposition, I admit that myself.

Helena. I have no patience with it. I want to know how many of those eighty-nine thousand seven hundred and forty-one who died from other causes, so called, really died from alcohol. I want to know what my poor friend who took to a new *furor* of drinking when she read from a first authority that only a hundred and sixty-four persons die in the year from alcohol, while eighteen thousand die of contagious diseases—I want to know what she will be said to have died from after she has drained her last cup?

Physicus. That will be said easily enough. She will have died of liver disease, or kidney disease, or paralysis, or apoplexy, or diabetes, or some other of the alcoholic maladies which get another name.

Helena. Precisely. And how, I want to know, does that excess of grocers die that dies from alcohol? Do the members of that excess die, like the one hundred and sixty-four, from the immediate and direct poisonous action of alcohol? I want to know—

Juridicus. I must really interpose, and, like the young gentleman of the Circumlocution Office, inform you that "you really mustn't say you want to know, you know." I know why the excess of grocers died; they died from alcohol, that is clear enough.

Physicus. To you and to me, but, as Helona very truly says, not to everybody; and I, as a physician, have felt most grievously the error that is annually conveyed in the returns of the thousands of cases where alcohol is the true cause of death, and where some other apparently different cause is assumed for the death. I do not doubt that if the real number of deaths from alcohol in the eighty-nine thousand seven hundred and forty-one from all diseases had been assigned rigorously to their true cause, more deaths would have been recorded from alcohol than from contagious disease or from any other special cause.

Juridicus. Probably. But how could the Registrar-General get at the precise facts?

Helena. In the same way as he got at the facts about the grocers, and in another place about the publicans.

Physicus. Not quite. In the case of the publicans and the grocers the Registrar takes those classes in the mass, and calculates their mean mortality, comparing it with that of other classes. In this way he shows that two publicans die to one clergyman, and the higher mortality of the publican is inferred as due to the habit imbibed by the publican of taking too much alcohol, which is, I believe, a correct inference. But the Registrar-General does not give the details of the recorded deaths of those publicans as from alcohol; he puts forward a general fact, and from that the natural inference follows.

Helena. I detect no difficulty. He is either right or he is wrong about the publicans and grocers. If he be right, as he must be, nothing is wanting in order to make an analysis of the causes of death in those two classes, as those

causes are rendered in the returns. This done, let him see what *nominal* causes led to the excess of mortality. Last of all, let him use those nominal causes, which in their entirety are the deaths from alcohol, as a test of the deaths from alcohol through the eighty-nine thousand seven hundred and forty-one.

Physicus. The computation would, on the whole, be very just.

Juridicus. I fear it would not bring out a hundred and sixty-four as the mortality from alcohol in one year in the Metropolitan district.

Helena. Of course it would not, and why should foolish people be misled?

Juridicus. Because they are foolish, and you cannot make them wise. Answer a fool according to his folly.

Helena. This is not an answer to a question. It is a piece of gratuitous information which, conveyed to the public, should be put, as I think, in so plain a way that even a fool should not err therein.

Juridicus. You correct me correctly.

Physicus. And wisely too. It is more important to teach the exact truth in all its bearings to the simple and wrong-headed than to wiser people. The more uninformed the audience the more easily it is led away by that which is doubtful, and which it suits its own ideas and pleasures to believe and to accept.

Helena. Returning to this Blue Book, which, by accident, has led to our morning's argument so far, there is at least one other danger in it I cannot omit.

Physicus. What is that?

Helena. At one part the author assumes a logical strain, and reasons by comparing alcohol in its bad effects on the community with the active remedies of the pharmacopeia, such as arsenic, sulphuric acid, and chloroform. These, it is urged, are most useful agents correctly used, though

they are poisons when used incorrectly. Alcohol, in like manner, is most useful when properly used, though it is a poison when used improperly. *Ergo*, if it be wrong and bad to use alcohol, it is equally wrong to use arsenic, sulphuric acid, and chloroform.

Juridicus. And what has our illogical Helena to say against that? It is common sense itself.

Helena. It is a much more marketable commodity. It conveys that alcohol, arsenic, sulphuric acid, and chloroform are all in the same category for common use. As if, in fact, people indiscriminately partook of the last three as they do of the first, instead of only taking the three last, as they do, under medical direction and advice.

Physicus. There is a distinction to be made there certainly.

Helena. If the author had said, out and out, alcohol is a very useful medicine which can be prescribed with the most striking benefit, when it is prescribed with judgment, in the same way as arsenic, and sulphuric acid, and chloroform are prescribed, then I can understand the logic of the argument, and can allow that any accidental injury from the use of alcohol may be permissible, seeing that no good is altogether unmixed with evil. But to compare this agent for general use, for indiscriminate use, by any and every person of every age and every class, with other agents which the chemists cannot sell without marking them "poison," is to me inexplicable.

Juridicus. But what if some people had learned to tolerate the taking of the agents marked "poison"?

Physicus. In the case of two of them, some have learned to take them habitually. The arsenic-eaters of Styria are examples of the first kind, and I have known several persons who have learned the habit of taking chloroform.

Helena. That argument of learning a bad habit can only be applied against me when you are able to defend

the habit, and to sustain that it is useful. If you can show that the indiscriminate taking of arsenic and chloroform is harmless, then you may compare the custom of imbibing alcohol, uncontrolled by proper advice, with the same use of the other things, but not before.

Juridicus. You contend that we can only institute a proper comparison by things that are comparable.

Helena. I do; and though it is only the logic of a woman who has never learned a word of the art, I must, with a woman's resolution, hold by it. Grant me, show to me that the articles called and sold as poisons may, by the habitual use of them, become necessities, then I will consider them side by side with alcohol. Tell me they are not necessities, but truly dangerous instruments, which must be controlled in the matter of sale and use, then I cannot compare them at all, in respect to their use, with an agent which is called a necessity, and which need not be controlled either in matter of sale or of use.

Physicus. To put the point in another way, you would argue that if there was any parallel between the use of alcohol and the uses of the articles labeled "poison" as they are sold, the said articles ought not to be so labeled, and ought to be sold as free from restrictions of sale as alcoholic liquors are now sold.

Helena. Quite true. Suppose, however, the chemists and druggists of the country were strong enough in their influence to obtain permission to sell these poisons of chloroform, or arsenic, or opium as the publicans sell wine, beer, and spirits, would you commend the practice, and say: Chloroform, arsenic, and opium are not more dangerous than prussic acid, strychnine, or deadly nightshade, which, it is true, are dangerous agents, if improperly used, but are most valuable in their proper place, when used with the caution that is required to make them valuable.

Juridicus. If the chemists and druggists at this moment

could sell arsenic, chloroform, and opium to every person indiscriminately, and if there was a habit which led the community, by a large majority, to take any one or all of these substances as luxuries to which they were accustomed, you may depend upon it that a great number of the vendors would insist on the maintenance of their right to sell the luxuries.

Physicus. And would be supported by the numbers who indulged in the luxuries.

Helena. Even though it were definitely proved that many thousands of persons a year were directly or indirectly destroyed by them; that crimes were fostered by them, and that every form of social disorder was kept alive by them?

Juridicus. Undoubtedly.

Physicus. I fear there is no escape from that conclusion. The argument would be as potent as it is in respect to alcohol, that these agents, used in the proper way, were useful; that any substance used improperly could be abused; that more dangerous substances than those opposed were in use, and were useful when they were employed with judgment; that the whole question of use turned on the matter of personal experience; and that the reform to strive after was not to abstain altogether, but to learn how to use and not to abuse the gifts that come to us; how to be moderate; how, in a word, to prove that temperance is a more excellent way than abstinence.

Helena. Can you imagine any person pleading in such a manner for any one of the three particular poisons I have named—arsenic, sulphuric acid, and opium?

Physicus. The Styrian arsenic-taker would argue in exactly the same strain. A sulphuric acid drinker I never heard of, and am not likely. An opium-eater I have heard argue on the very terms you have quoted, and with an addition which would seem irresistible in the mouth of an alcoholic.

Juridicus. What was that new and cogent reason?

Physicus. A right good one. It was that opium is a direct gift from Heaven, ready prepared for the use of man, and requiring only to be gathered to be enjoyed like an apple, a pear, or a comb of honey. "Alcohol," said he, "is not a gift. Man has to chemicalize before he can get it, and if many thousands of men were not employed in the manufacture of it, there would be no supply whatever. But my luxury grows. It came to me straight from the hand of Nature, and the cruder it is the better I like it."

Helena. I agree that was, in its way, an answer unanswerable. But to my point once more. Is it logical to compare the indiscriminate use of an agent like alcohol with the skilled use of other agents, and to argue on the application of one practice by the application of the other?

Juridicus. I must rule in fairness that it is not logical so to argue. In making a comparison of the two practices, we must either restrict alcohol to the same medicinal application as obtains with the other agents, or we must give as free liberty to the use and application of the others as is given so willingly to alcohol.

Physicus. I thank Juridicus for that judgment, and you, most shrewd advocate, for having so cleverly extracted it. I am quite willing, on my part, to admit alcohol as a medicine, and I would not, indeed, like to be deprived of it, although, I confess, for that purpose I very rarely want it. Whatever advantages to the world may come from it are as fully attainable by the medicinal use of it as by the use of any other substance of extraneous worth. On the other side, the evils derivable from its general use, by any one who wishes to call for it, are quite as great as would be obtained from other chemical substances of which the human body could, by a course of training, become tolerant.

Juridicus. Would you then never trust a man with the administration of alcohol to himself even medicinally?

Physicus. If I did it would be, in nine cases out of ten, to that man's detriment.

Juridicus. But suppose he was guided, as Dr. Farr says, by his experience?

Physicus. With alcohol and with all these surreptitious sources of excitement there is no such guidance, because there is no bottom to the experience by which it can be sounded. To-day a man will take two ounces of alcohol—that is about half a pint of sherry—under certain conditions; to-morrow he will take the same under different conditions. The effect to-day will do him, as he thinks, some good; the effect to-morrow will be less definite, so the next day he will think it necessary to take a little more. Thus the two ounces will extend into two and a half, and then into three, and so on, until the alcoholic constitution is completely established.

Juridicus. That is too often too true, and of course you are tracing the way in which all men who become drunkards travel from sobriety into drunkenness. What occurs to my mind is, that there might be invented a kind of pledge, a resolution determined upon by a whole community, that not a member of it would ever take more than a certain quantity.

Physicus. If that plan had been a possible success, you would never have heard the words "Teetotalism," or "Total Abstinence."

Helena. I have been told that that plan actually was tried in the early days of the temperance reform.

Physicus. It was, and it signally failed. The failure caused Mr. Joseph Livesey, of Preston, who, I am happy to say, still lives, to inaugurate total abstinence as a new and definite system of reform.

Juridicus. Against which there is no appeal.

Physicus. None. No total abstainer ever became a drunkard by adhering to his principles.

Juridicus. You differ greatly from the larger number of your learned profession in this particular matter of experience.

Physicus. I am sorry for it, and should be sorry to offend even one of them by my views. But if I were so unfortunate as to offend them all, I dare not waver. You remember the saying of St. Augustine—"If an offence come out of truth, better is it the offence come than that truth be concealed."

Juridicus. And did not some one else ask—"What is truth"? I would ask, where is truth to be found if not in experience?

Helena. In a well.

Physicus. Aye, so a very wise man tells us. Yet in this particular question the truth is on the surface, and presents itself to us at every moment we look for it. All know the truth, and the writers and speakers who try to apologize for the effects of alcohol, and gloss them over, are as well aware as I am that an agent which brings on a morbid craving for itself, a craving which the wisest and the best cannot resist, and which means death, certain death, whenever it is fully developed, cannot be an agent which should be left to the "experience" of those who are doomed to fall by it.

Juridicus. That surely can only hold good in respect to the "experience" of the weaker and less educated members of society.

Helena. Women, for example.

Juridicus. I did not refer to women specially, I included both sexes, though my mind was dwelling most on men of science who understand these subjects.

Physicus. I think I gave an example that men of science are not proof against these morbid appetites, when I quoted the experience of the really great Sir Humphrey Davy.

Juridicus. He was rather a chemist than a physiologist.

I want to know what strength men of science in your profession exhibit in the way of self-control. They, I should suppose, can say to alcohol, "Hitherto I will go with you, and no further."

Physicus. I am not aware that members of my profession are more proof against the danger than the rest of the community of the same position in relation to learning and social status. A great many of them abstain altogether, far more than is generally supposed; but those who do not abstain are the same as the rest of the world. They accept the pleasure, as they consider indulgence in wine to be, and they accept the consequences.

Helena. Some of them are most peculiar in their views on this serious question. We were traveling through the district of lovely Killarney last year; we met a fellow-traveler whose conversation was most refreshing. He knew everything, from the *Pollio* of Virgil and the *Meditations* of Camerarius to the last new play in Paris, and the coming Oratorio of Hezekiah. What his name was we did not then gather, but we learned from himself that he was a Doctor of Physic and a tremendous Darwinite.

Juridicus. You may sum him up by saying that he was one of the most learned and accomplished men you will meet with in an age.

Helena. That is just what he was, and that is why I refer to him. At one of the hotels where we stayed we got on this alcohol question. He sat next to me at the *table d'hôte*, and observing that I took no wine, pressed me rather to take some, and so we began to talk about it.

Physicus. He took wine himself, I suppose?

Helena. Oh, yes; and all the while found fault with the practice as a bad custom of society.

Juridicus. In which respect he was not in the least peculiar.

Helena. Granted. And yet his own excuse was *most*

peculiar for a man of his intelligence. He explained that he had learned how to take wine with safety, by an infallible sign.

Physicus. You startle me ! Some great discovery must needs be at the door.

Helena. You shall hear. He said : " I take wine every day, always once, sometimes twice ; but I inevitably stop when I feel that it produces just a sense of fullness in my head."

Physicus. And how much wine did he require to produce that sign of, enough for this time ?

Helena. The very question I asked him. To which he replied that experience had taught him never to be guided by quantity, but always to be guided by effect. If he was very tired and hungry, it might require the whole of a bottle to produce the indication ; if he was idle and replete, two or three wineglassfuls were quite sufficient.

Physicus. He could measure himself with so much refinement ?

Helena. He could, according to his own experience and judgment.

Physicus. The judgment, to your mind, was not after the wisdom of Solomon ?

Helena. Well, candidly, it did seem to me the strangest of all judgments.

Juridicus. It was highly amusing. She talked to him like another doctor.

Helena. Nay, I did not do that either. I simply asked him whether that sense of fullness in the head did not mean that the vessels of his brain were at their extreme tension, and whether it was not dangerous to subject them every day to so great a strain.

Physicus. There you put a very sound question, which would rather stagger him, I think.

Helena. He was not a man to be staggered with any-

thing. To my wonder, he assented to that view ; declared it was physiologically true ; admitted he would not recommend another person to try the same experiment ; but added, that he felt he must accept the risk, which, after all, was not greater than a ride, by rail, every day from London to York.

Juridicus. You hardly present all that he expressed. He explained that life was surrounded by risks of all kinds, and that if you stopped at every trifle that was incident to enjoyment, you might as well go into a Trappist monastery straightway and commence to dig your own grave. Then followed the observation about the daily ride, by rail, from London to York.

Helena. I remember that was the line of argument, and I remember also that he supported his argument by his practice.

Physicus. He produced the state of tension which was to him so determinate a sign of—"enough."

Juridicus. There was no mistake about that ; but it took a great deal of wine to do it. He had been out at a badger-hunt, and had come in wet, empty, and fatigued, from which conditions, in combination, he was very much below the mark. At last, by cautious filling up, he arrived at perfection, and perceived it himself.

Helena. But we perceived it first. He lapsed into that other man your friend, the Consul in Japan, discovered.

Physicus. And he treated the other man ?

Juridicus. No, no. We must be fair. He stopped quite short of that. He took a cup of coffee, and saying he was just comfortably primed, that he had taken his *quantum*, and no more, he bade us a jovial good-night and retired to bed.

Physicus. And do you, Juridicus, hold up that example as a lesson of wise and sound experience ?

Helena. He did at the time, but he has since changed his mind. Experience has taught him better.

Physicus. Experience of what kind?

Helena. The fate of our fellow-traveler. A few months after we parted from him we heard who he was, and where he lived. One night he screwed himself up to the right mark once too often, retired to bed upon just his *quantum*, bidding everybody a jovial good-night, and an hour later was found by his servant unconscious by the bedside, and paralyzed through half his body. Fortunately he is, we hear from a mutual friend, recovering; but his history and strange infatuation clings to me more than I can tell you.

Physicus. That one instance unsettles the argument of Dr. Farr, I see, in both your minds, and makes you look too solemn for healthy existence. Let us change the topic of conversation, and mix some pleasure with our learning.

Juridicus. I must protest, while I yield. If you had been a gamester, my Physicus, you would have been a millionaire, for you would have had the courage to leave off when your tide was at its flood.

DIALOGUE XII.

A CONVERT TO TOTAL ABSTINENCE—MODES OF CONVERTING TO ABSTINENCE—SUMMING UP OF A MODERATE DRINKER—THE SAVAGE RESIDUUM—TREATMENT OF EXHAUSTION, COLDNESS, AND FEEBLE HEART WITHOUT ALCOHOL—SUDDEN CESSATION OF HABIT OF DRINKING ALCOHOL—THE PRACTICE SOUND—PROOFS—INJURIOUS ACTION OF ALCOHOL ON BRAIN-WORKERS—FAREWELL.

Helena. And so it is really the fact that you must leave us this morning. Will your implacable enemy, duty, show you no mercy?

Physicus. Mine enemy has been most merciful. He has allowed me three extra days, which have been spent in your society and in that of Juridicus in a manner too pleasant ever to be forgotten.

Juridicus. The pleasure is reciprocal, and we have tried to learn from it as well as to enjoy it. I have often felt that we must have taxed your patience by our many inquiries; but should it even be so, you have your reward—you have converted Helena to total abstinence.

Helena. If that can be called a conversion which consists in mere nominal change of profession, I am converted. Practically, I have always been so nearly a total abstainer, that the loss of the luxury of alcohol will never be felt by me. Now, however, I confess myself as of your ranks, and as freed altogether from a burden which, reduced even to its smallest dimensions, is an embarrassment.

Physicus. I congratulate you on your resolve. If the

burden you name were of the mere lightness of a feather I should still congratulate you. You have not only cast off the weight, but the badge of your slavery. Now you can plead for the enslaved with a free and wholesome conscience.

Helena. That is precisely what I feel. I have hitherto been a preceptor, I shall now be an example as well, and the one will sustain the other—not that I wish to be what is called a regular proselytizer.

Physicus. In all those views you are correct. Your example, once shown, is worth a hundred precepts which you do not yourself follow. I agree, too, that you need not attempt to proselytize. I myself never open my mouth on the subject of temperance and abstinence unless I am challenged to do so. I take it for granted that abstinence is a true and natural foundation, and I act accordingly. If men or women, then, challenge me from their artificial mounds, I am ready to meet them.

Juridicus. There is much force in that method, but it requires a gentle, and, at the same time, a resolute will to carry it out. I have more than once been held back from giving the question serious thought owing to the interference of some over-enthusiastic, and, perhaps, not over-lettered advocate, thrusting his crude opinions on me, *nolens volens*, as if I were not like himself a free man, and ought to submit to be beaten into submission.

Physicus. Allowing a great deal for the earnestness which prompts enthusiasm, I am obliged to agree with you that an overwrought and badly-directed zeal does often great harm to the cause of temperance. I believe that sometimes good men err in this respect. "It is hard to be tolerant of evil," as the proverb teaches; and the good, seeing the incalculable evils that spring from drink, are led, when they are naturally of warm sentiment on all subjects, or of untrained habit in reasoning, or a mixture of

these, to write and speak in a tone which is not agreeable to cultured minds.

Juridicus. And often still less to uncultured, which require, of all others, the most careful treatment.

Physicus. The teacher soon learns that fact when he has gained practice, and he quickly discovers also what real progress he has made by his teaching, from the mode in which it is translated and used by those whom he has tried to instruct.

Helena. I begin to feel very uncomfortable. I am on my probation, and how I shall comport myself is now a serious matter.

Physicus. I have no fear whatever about you.

Juridicus. The sly critic, it is about me he trembles.

Physicus. Why should that be—you are not a convert?

Juridicus. Not altogether—that is to say, I am not yet convinced with all my heart, with all my soul, and, therefore, with all my strength. My soul is convinced, but not my heart.

Physicus. And you would, therefore, put yourself forward as illustrating the couplet—

“ The man convinced against his will
Is of the same opinion still.”

Juridicus. That hardly meets my case. In all that appeals to my reason I am with you. Yet I suppose the craving still holds me prisoner. Or it may be I am unhappily spellbound by the influence of hereditary taste or inclination for alcohol, which in my family was unfortunately very strongly developed.

Physicus. I might use the same argument.

Helena. So, alas! might I; and my brother did use it, up to the very last, as the grand and fatal excuse for his death from excess of alcohol.

Juridicus. It is admittedly a weak argument, because it

shows, if it even be true, an arrant weakness in the man who uses it for his own defence. You must let me think over that which we have discussed in our pleasant way. On some points I have thought, and have come to a decision, but not on all.

Physicus. It would gratify me sincerely to know on what points you, as a moderate drinker, have made up your mind ; but, perhaps, it is premature or pressing to ask so much of you before I leave.

Juridicus. Not at all ; I am anxious only for candor, both of thought and expression, on the great national vice which you would lay bare and spare not. It concerns my professional life almost as closely as it does yours, and you know how my heart has once been rent by the results of the evil.

Helena. More often than once. A wife may know better, perhaps, than the husband himself, those secrets.

Juridicus. Let the sentiment pass. Apart from sentiment, my reason leads me to these conclusions, as proved and indisputable. *Firstly*, that alcoholic drinks are not in any degree a necessity for the maintenance of life. *Secondly*, that they are, on the whole, most injurious to life morally, physically, socially. *Thirdly*, that the appetite or craving for such drinks is not a natural appetite, but acquired, and living by what it feeds on. *Fourthly*, that the excuses which men and women make for their indulgence in alcoholic drinks, are, as a rule, either the bad excuses the selfish excuses, for luxury, or the more automatic sayings and expressions which come so readily on the tongue, and have so little meaning—as when one says, “It’s a fine day”; or, “What do you think of the weather”? or, “Have a glass of wine to do you good”; or, “You would be better for a stimulant”; or, “You must be kept up,” and so on. *Fifthly*, that whenever a man or woman feels that alcohol is in the slightest degree a necessity for life,

or happiness, or activity, and experiences these sensations as a regular thing, he or she, whoever he or she may be, is unsafe, and has but one truly safe course to follow, and that is to master the necessity by getting free of it. *Sixthly*, that the complete reformation of the alcoholic world can only be achieved by the complete practice of total abstinence from the leaven of evil. *Lastly*, that in the management and the training of the rising generation the use of alcohol should be rigorously and absolutely excluded. These, my good Physicus, are the expressions of my conversions as far as they go, and to them you are heartily welcome.

Physicus. I will press now for no more. If the whole world were as ripe for complete conversion as you are, my mission and that of my colleagues in the cause of universal temperance would well-nigh be closed.

Juridicus. It is closing, with victory on its banner; of that I am convinced. And, though it may take down your honest pride, I most firmly believe the time will come when the world will wonder why such men as you, Physicus, ever had to use such persuasions and such arguments at all. Why, it will be said, enforce with so much labor truths that were so obvious, natural, and childish?

Physicus. I echo that belief, and I gladly echo it; for my honest pride, as you call it, extends only to the results of the doing of that which is useful and necessary in my own time. I know that the world is not as yet in its manhood, and I can conceive it one day speaking of itself—"When I was a child I thought as a child, I spoke as a child, I felt as a child; but now I have become a man, I have left off childish things."

Juridicus. That is a new way of thinking, at least to me, yet possibly true after all; and by that way you would, naturally, connect the habit of indulgence in stimulants and narcotics as a part of the childhood of the world.

Helena. And the discovery and application at first of intoxicating agents as belonging to the same age and conditions ; when the minds of men, brutal, sensual, and not as yet charged with the full appreciation of the created immensity and all its glories, were content to be filled with factitious dreams and shadows of the night, in presence of the day.

Physicus. You guess my meaning entirely. Alcohol is a mere temporary shroud. The savage, with the mansions of his soul unfurnished, buries his restless energy under its shadow. The savage did not really require it, and would have been less long a savage without it ; but he found it in his primitive searchings, used it, liked it, and transmitted its use to those who followed him.

Juridicus. Then we shall cease to follow the practice in time, as we become more and more civilized, by a process of natural exclusion.

Physicus. Not alone. A savage impression becomes, by continued cultivation, a very deep-rooted impression, just as weeds as well as wheat grow in the richest soils. We require, therefore, in this day to root up as well as to cease to sow.

Juridicus. That is just.

Helena. We may, I hope, safely leave Juridicus to his fate. He is a Saxon, slow to perceive, but most resolute when he has chosen the way he should go. Meantime, and in the brief interval before your departure, please reply to a few questions, Physicus, to which a novice ought to have a ready answer.

Physicus. With pleasure, as far as I am able.

Helena. When a person tells me he or she is exhausted, and must have wine or some other stimulant to recruit the failing powers, what is to be said ?

Physicus. The plain and the simple truth, that all alcoholic fluids and all stimulants are in reality depressants ;

and that although, at first, by calling intensely into play the natural force, they seem to excite or bring forth force, and are therefore named stimulants, they themselves supply no force at any time. That they take up force, and apply it in liberating themselves from the body they have entered, by which means they lead to exhaustion and to paralysis of power. In other words, that force which should be expended on the nutrition and sensibility of the body is expended on the stimulant.

Helena. That is plain; but what should be recommended in the place of the stimulant?

Physicus. Rest in the first instance. Rest, however short it may be, is the best of all restoratives. Five minutes' rest is worth a glass of the best wine in its direct action, and is good in every way. After rest, food and sleep.

Helena. When you are very wearied from a long walk, or a long physical task of any kind, what do you do?

Physicus. I rest by sitting still, or reclining at length; if that be possible. Then I take a light meal, if that be at hand; or a draught of milk, if solid food is not ready; or a dish of oatmeal or wheatmeal and milk, if that can be secured. Afterward I take a warm bath, when that is at hand, and, as soon as I can, I go to bed. These are all natural plans, simple as the drinking of any stimulant, and safe as nature herself.

Helena. And what if a person says he is very cold, and must be warmed by a stimulant?

Physicus. Meet him with the truth again, that of all cold-producers alcohol is the worst. Explain that the glow which is felt on the surface of the body after alcohol is taken, is but due to the circumstance that the vessels of the surface, paralyzed by the alcohol, are surcharged with the warm blood from the heart—blood which is now giving up its vital heat to the outer air. Explain further, that no more warmth can be given to the body by this means than

would be given if a portion of blood were drawn from the body, and were spread out over an equal surface to cool in the air.

Helena. I have read all your proofs of the power of alcohol to reduce the heat of the body, and have compared them with the results of practical experience, from both of which sources of information I feel there is only one conclusion to be drawn—the conclusion you have stated. The illustration you have now supplied is an easy one by which to describe the action of the stimulant, and is, for daily practice, sufficient as an argument. But once more, how is the need of warmth best and actually supplied?

Physicus. By the supply of food, by addition of clothes, by exposure to external warmth, and by giving the chilled person a draught of any heated nutritious drink. On the whole, the best drink is hot milk and water, sweetened with sugar. That drink, with bread and butter as solid food, and with the butter well spread, is the choicest meal you can supply for warmth, at an emergency. It is better than tea, or coffee, or cocoa, although cocoa is a most excellent substitute. It is a grand mistake not to have hot milk or cocoa ready on all refreshment-stalls and in all refreshment-rooms, for travelers, during cold weather.

Helena. Another question. What if a person tells me he or she must have a stimulant, because their heart is so weak, and requires so often to be stimulated to keep it from sinking?

Physicus. Again the simple truth. Admit candidly that under the influence of alcohol the action of the heart is quickened, and explain at the same time why it is so. Explain that the increased motion is not due to increase of power, but to diminished resistance of the blood under the stroke of the heart, owing to the enfeeblement of the blood-vessels, which are filled with blood by that stroke. Explain that the heart, in fact, is running down under the

excitement, as the spring of a watch runs down when the check that regulates the motion is broken ; and that what for a moment seems to be gain, is loss and destruction.

Helena. That the heart under this course, often repeated, wears out too rapidly, and becomes a broken heart ?

Physicus. Yes ; that it wears out in proportion to the degree in which it is stimulated into motion beyond its powers, and that the degree of stimulation is fairly proportioned to the amount of alcohol taken.

Juridicus. So that a person may make his heart beat as many more times in the twenty-four hours as he likes.

Physicus. Within limitations that are fatal in character, certainly. He may make his heart beat from one or two thousand to as many as twenty-six thousand strokes extra in the twenty-four hours. If he much exceeds this pressure, however, he may stop action altogether.

Juridicus. Do any persons really take so much alcohol as to increase the heart-stroke twenty-six thousand beats in a day ?

Physicus. Many. A man who takes a pint of whisky a day, or the equivalent of that in other drinks of alcohol, does that feat every day of his life.

Helena. And soon beats his heart out altogether !

Physicus. With very few exceptions, he beats it out, as you say, on a measured plan. Each heart is constructed to do a given amount of work in a lifetime ; one a limited amount, another a more extended. In either case, each stroke rendered is a stroke taken off the gross account ; so that those who are taking off twenty-five thousand strokes, in excess, per day, are reducing their lives rather quickly, even if they were destined originally to be worth work for threescore years and ten.

Juridicus. How much should you, in round numbers, compute to be the loss of heart-life of such a man in years ?

Physicus. I have brought it by a pretty close calculation as one year in five.

Helena. I see now the line of argument. Once more, then, what is to be done in these cases to substitute the stimulant?

Physicus. Chiefly rest. Good, moderate, mixed diet, and as much rest as can be obtained. There is nothing, I find, so really effectual as to get persons in the position you name to go early to bed; to go to bed at eight o'clock, if they can; and to keep in the horizontal position for ten hours, even if they do not sleep for that time.

Helena. And what in these and in other instances am I to say on the common question, whether the stimulant should be left off gradually or instantly?

Physicus. The answer to that question admits of but one instruction, and that is, to leave off at once. I may tell you as a result of practice, that in my field of observation on this subject, large as it is, I have never once seen a good and decided result from the system of breaking off gradually from the habit of drinking alcohol.

Juridicus. The craving, I suppose, interferes so seriously?

Physicus. That is the case; the little drop keeps up the desire for the large drop.

Helena. And is there no positive danger from the sudden withdrawal of the stimulant?

Physicus. I have never seen the slightest. I have heard of such dangers, but have never met them. I was once called to see a man who was said to be in such danger, and how do you think I found him?

Helena. I cannot say.

Physicus. Drunk. He felt low, and began to treat himself as usual, but then, recalling himself to his promise, he stopped the potation. The desire increasing, he drank until he forgot he had broken his word, and thereupon

feeling very odd, he alarmed his friends by declaring he was suffering from abstinence, and must be sustained. He was, in fact, hysterically prostrated, and this was one of his delusions, that he should die if he were not allowed wine. That is the worst case of danger from withdrawal of stimulant I have ever encountered, and it is not very solemn in its lesson.

Juridicus. I was much swayed myself, however, for a long time, by the idea that the process of sudden cessation from a fixed habit must be dangerous, and the case you name would not alone have convinced me to the contrary. Indeed, I have the authority of one of your classical authors for belief against sudden changes of habit.

Physicus. Celsus?

Juridicus. None less; and he was a wise man as well as a great medical classic.

Physicus. I remember the passage of his work to which you refer; it is well written, and with much good sense; but the lesson does not apply to the habit of taking alcohol.

Juridicus. I do not myself now think it does.

Physicus. And what has changed your opinion?

Juridicus. Those prison records to which you and others have so triumphantly directed the public attention. I have at last looked into them myself, and have made the fullest inquiries I could. There is no gainsaying the results of abstinence there.

Helena. You mean that only a few suffer in prison after being suddenly deprived of strong drinks?

Juridicus. I mean more than that. Practically none suffer. Not one disease that could be named and clearly defined has arisen, as far as I can learn, from enforced abstinence. On the contrary, the abstinence has been followed, as a whole, with the most extraordinary improvement in the general health of the abstainers.

Helena. I am prepared with my answer on this point of

sudden abstinence and its advantages. May I trespass on Physicus with one more question?

Physicus. Assuredly.

Helena. What shall I say to the brain-workers—to those of them who tell me they must needs work against time, and must either have a fillip or go down at their work?

Juridicus. The same question was in my mind. It does seem to me possible that to the languid brain a little quickening of the circulation, even at the expense of the heart, may now and then be useful.

Physicus. You have pointed your venture with the two words *now* and *then*. If they could be honestly introduced, I should be half inclined to go with you on this one and almost exceptional subject. Unfortunately, no such words are admissible into the argument. Admit “now and then,” and you admit “always when called for”; admit “always when called for,” and you admit “every occasion”; admit “every occasion,” and you admit “habitual use” with all its consequences.

Juridicus. I see the danger.

Helena. And to the brain-worker, I suppose the danger is exceptionally great?

Physicus. More than to any man. The brain-worker sits to work at the desk or in the reading-chair, and as a result eliminates slowly by secretion from the skin and lungs. He is in danger, from work alone, of keeping his heart in excess of motion. His brain is too full of blood to require stimulation from any such an agent as alcohol. He is, if I may so say, *positively* electrified. When he rises from his hard study he is dazed, but not in the sense of a man weary from working, or exhausted.

Juridicus. You are quite right. He is at first just as if he had taken wine; but then he soon collapses.

Physicus. For the same reason; because the nervous control over his circulation is exhausted. The man wants

food and rest—not a stimulant that will add to his misery. He wants also exercise in the open air, not a return to the exhausting nervous labor.

Juridicus. True, true to the letter. Yet he may be after all the victim of necessity, a necessity which knows no law.

Physicus. If that be so, I say farewell to good brain-work, because, then, farewell to the best brain-workers, of whom there are already too few. If we must burn them out in that way, like martyrs at the stake, though they kindle fires which light all England through, we purchase the light too dearly, even for England.

Helena. I know my lesson in relation to brain-work and stimulants. It completes the list at the present time, and to it may I add, with all respect, one observation of my own?

Juridicus. The court allows it.

Helena. It is very short and very straightforward, and would not, I fear, please some of the brain-workers if they heard it. It is that there is a great deal more fuss and bother made about brain-work, and brain-pressure, and brain-exhaustion, and breaking down at brain-work, and the like, than there is any occasion for or truth respecting it. In many cases, I am positive, it is the alcohol, not the work, that does the damage. In other cases it is the habit of working at unnatural times, and not taking rest afterwards. In a third class it is the eager ambition to get first, and do most in least time. And, in another, and still more pitiable case, it is poverty—pressure at home, and worry—that becomes the destroyer. These causes acting separately, or, as is not infrequent, in combination, are far more potent to kill, than is brain-work of the most refined and laborious kind.

Physicus. If I could vote for women into the profession of medicine, you, my learned and far-seeing Helena, should have my vote, though it placed you in the President's

chair of the College of Physicians. You said the truest thing, in that last sentence, that has been said yet, and it shall not pass unrecorded. But now time presses, trains wait not, and the carriage at the door tells me I must be gone.

Helena. When we return to town we will hold, I hope, another—I am afraid to use the word in its literal sense—"symposium." Juridicus there has still to be converted.

Physicus. There are many topics, truly, that we have not admitted into our arguments. You must keep a list, and Juridicus must reserve certain points for further judgment. Adieu!

Juridicus. I trust to you to find time, if it be but by a post-card, to report your safe arrival home. Farewell.

Helena. My love to your wife, and farewell.

Physicus. Once more, Adieu.

THE END.

FOR SUNDAY-SCHOOL LIBRARIES.

THE National Temperance Society and Publication House have published one hundred and nine volumes, written by some of the best authors in the land. These have been carefully examined and approved by the Publication Committee of the Society, representing the various religious denominations and temperance organizations of the country.

These volumes have been cordially commended by leading clergymen of all denominations, and by various National and State bodies all over the land. The following is the list, which can be procured through the regular Sunday-school trade, or by sending direct to the rooms of the Society, 58 Reade Street, New York:

At Lion's Mouth.....	\$1 25	Dumb Traitor, The.	\$1 25
Adopted	60	Emerald Spray, The.....	40
Amid the Shadows.....	1 25	Eva's Engagement Ring...	90
Andrew Douglas.....	75	Echo Bank	85
Aunt Dinah's Pledge.....	1 25	Esther Maxwell's Mistake	1 00
Alice Grant; or, Faith and		Fanny Percy's Knight Er-	
Temperance.....	1 25	rant	1 00
All for Money.....	1 25	Fatal Dower, The.....	60
Brewery at Taylorville, The	1 50	Firebrands	1 25
Barford Mills ..	1 00	Fire Fighters, The.....	1 25
Best Fellow in the World,		Fred's Hard Fight.....	1 25
The.....	1 25	Frank Spencer's Rule of Life	50
Broken Rock, The.....	50	Frank Oldfield: or, Lost	
Brook, and the Tide Turn-		and Found.....	1 50
ing, The	1 00	From Father to Son.....	1 25
Brewer's Fortune, The....	1 50	Gertie's Sacrifice; or,	
Caught and Fettered.....	1 00	Glimpses at Two Lives	50
Circled by Fire.....	40	Glass Cable, The..	1 25
Come Home, Mother.....	50	Harry the Prodigal.....	1 25
Coals of Fire	1 00	Hard Master, The	85
Curse of Mill Valley, The.	1 25	Harker Family, The.....	1 25
Curse and the Cup, The. .	40	His Honor the Mayor.....	1 25
Day with a Demon, A.....	40	History of a Threepenny	
Drinking Fountain Stories,		Bit	75
The.....	1 00	History of Two Lives, The	50

FOR SUNDAY-SCHOOL LIBRARIES.

Hopedale Tavern, and		Piece of Silver, A.	\$ 50
What it Wrought.....	\$1 00	Pitcher of Cool Water, The	50
Hole in the Bag, and Other		Pledge and the Cross, The.	1 00
Stories, The.....	1 00	Queer Home in Rugby	
How Could He Escape.....	1 25	Court, The.....	1 50
Humpy Dumpy... ..	1 25	Rachel Noble's Experience	90
Image Unveiled, The.....	1 00	Red Bridge, The.....	90
Jewelled Serpent, The.....	1 00	Rev. Dr. Willoughby and	
John Bentley's Mistake....	50	his Wine.....	1 50
Job Tufton's Rest.....	1 25	Ripley Parsonage.....	1 25
Joe's Partner.....	50	Rose Clifton.	1 50
Jug-or-Not	1 25	Rosa Leighton; or, In His	
Little Girl in Black.....	90	Strength.....	90
Life Cruise of Captain Bess		Roy's Search; or, Lost in	
Adams, The	1 50	the Cars.....	1 25
Lionel Franklin's Victory.	1 25	Saved	1 25
McAllisters, The.. . . .	50	Silver Castle.....	1 25
Mill and the Tavern, The..	1 25	Secret of Victory.	
Model Landlord, The....	60	Seymours, The	1 00
More Excellent Way, A....	1 00	Sought and Saved... ..	1 25
Mr. Mackenzie's Answer..	1 25	Step by Step.....	40
National Temperance Ora-		Strange Sea Story, A.....	1 50
tor, The	1 00	Temperance Doctor, The..	1 25
Nettie Loring.....	1 25	Temperance Speaker, The.	75
No Danger	1 25	Temperance Anecdotes....	1 00
Norman Brill's Life-Work.	1 00	Time Will Tell.....	1 00
Nothing to Drink	1 50	Tim's Troubles.	1 50
Old Times.....	1 25	Tom Blinn's Temperance	
On London Bridge	40	Society.....	1 25
Our Coffee-Room	1 00	Ten Cents.....	1 25
Old Brown Pitcher, The....	1 00	True to his Colors.....	1 25
Out of the Fire.....	1 25	Vow at the Bars.....	40
Our Homes	1 50	Wealth and Wine.....	1 25
Our Parish.....	75	White Hands and White	
Over the Way.....	1 00	Hearts.....	1 00
Packington Parish, and		White Rose, The.....	1 25
the Diver's Daughter... 1 25		Wife's Engagement Ring,	
Paul Brewster and Son.... 1 00		The... ..	1 25
Philip Eckert's Struggles		Work and Reward.....	50
and Triumphs.....	60	Zoa Rodman.....	1 00

Either of the above will be sent by mail, post-paid, on receipt of price.

Address **J. N. STEARNS, Publishing Agent,**
58 Reade Street, New York.

TEACHERS' HELPS.

Alcohol: Its Nature and Effects. 18mo, 392 pp.
By CHAS. A. STORY, M.D. **.90**

This is an invaluable help to the teacher of any Temperance school. It is filled with facts, incidents and logic of the most unanswerable kind, relating to the nature and effects of alcoholic drinks. The book consists of ten lectures, but they read like romances.

Ten Lectures on Alcohol. 12mo, 340 pp. By B.
W. RICHARDSON, M.A., M.D., F.R.S. Paper, 50 cts. ;
cloth, ... **1.00**

THE NATIONAL TEMPERANCE SOCIETY has just published in one volume all the Lectures of Dr. Richardson on Alcohol, which makes one of the most valuable and cheapest books ever issued. It contains the following:

On Alcohol. Six celebrated "Canetr Lectures" before the Society of Arts. Action of Alcohol on the Body and on the Mind. Moderate Drinking; for and against. The Medical Profession and Alcohol. The Liberty of the Abject. Why I Became an Abstainer.

Text-Book of Temperance. By Dr. F. R. LEES.
Paper, 50 cts. ; Cloth, ... **1.00**

We can also furnish the above book, which is divided into the following parts: 1. Temperance as a Virtue. 2. The Chemical History of Alcohol. 3. The Dietetics of Temperance. 4. The Pathology of Temperance. 5. The Medical Question. 6. Temperance in Relation to the Bible. 7. Historical. 8. The National Question and the Remedy. 9. The Philosophy of Temperance.

"Cantor Lectures" on Alcohol. By BENJAMIN
W. RICHARDSON, M.A., M.D., F.R.S., of London ; with
an Introduction by Dr. Willard Parker, of New York.
12mo, 190 pp. Paper, 25 cts. ; cloth, ... **75**

Sewall's Stomach Plates. Set of eight, 27 x 34
inches. On paper, \$9.00 ; mounted on rollers, **12.00**

Bacchus Dethroned. Paper edit., 50c.; cloth, **1.00**

Alcohol as a Food and Medicine. By EZRA M.
HUNT, M.D. 12mo, 137 pp. Paper edition, 25 cents ;
cloth, ... **60**

Our Wasted Resources. By Dr. WM. HARGREAVES.
12mo, 202 pp. The Missing Link in the Temperance
Reform ; giving the most valuable statistics ever pub-
lished. Paper edition, 50 cents ; cloth, . . . **1.25**

The Medical Use of Alcohol. By JAMES EDMUNDS,
M.D., of London. 96 pp. Paper, 25 cts. ; cloth, **60**

Physiological Action of Alcohol. By Professor
MUNROE, ... **05**

History and Mystery of a Glass of Ale, **05**

Address J. N. STEARNS, Publishing Agent,
58 Reade Street, New York

Text-Books for Schools.

The Temperance Lesson Book. 12mo,
220 pp. By B. W. Richardson, M.A., M.D., LL.D., F.R.S.
Paper, 25 cents. Cloth, ... **.50**

This is a series of short lessons on alcohol and its action on the body, accompanied with suitable questions, designed for study in public and private schools, and reading in schools and families. This book has just been published in England, and has been everywhere received with great favor. Dr. Richardson is well known as the author of the Cantor Lectures "On Alcohol," and is one of the ablest physicians in the world.

Juvenile Temperance Manual. 12mo,
140 pp. By Miss Julia Colman. Paper, 25c. Cloth, **.60**

This is a new handbook written by Miss Colman and intended to assist teachers and all others who teach and train the children for total abstinence. It provides a series of lessons illustrated with experiments, objects, blackboard exercises, and problems; on alcohol, its origin, its nature, its effects, how to get rid of it; on tobacco and on profanity, with Scripture ticket lessons; notices of such books, tracts, leaflets, and charts as can be used for helps; plans for primary classes, advanced classes, and reformed men's Bible classes. The book can also be used in all sorts of juvenile organizations and families, and is entertaining reading for any one.

The Temperance School. 18mo, 36 pages.
By Julia Colman. Per dozen, ... **.60**

This is intended as a guide to any one who is proposing or *wishing* to start Juvenile Temperance work in any shape, or who has already started it. The Temperance School is nothing more nor less than a Band of Hope, conducted like a Sunday-school, and very enjoyable and profitable it can be made to both teachers and scholars.

Catechism on Alcohol. 18mo, 36 pages. By
Julia Colman. Per dozen, ... **.60**

This is now the prevailing text-book in use in all Juvenile Temperance Work in this country. It has also been reprinted in England by the leading temperance publishing house there, and solicited for India and Sweden. It treats of the nature and effects of alcohol, and the objects and methods of Temperance Work. It includes a section on Tobacco and six Responsive Scripture Exercises.

Address **J. N. STEARNS**, Publishing Agent,
58 Reade Street, New York.





**PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET**

UNIVERSITY OF TORONTO LIBRARY

HV
5060
R484

Richardson, (Sir), Benjamin
Ward
Dialogues on drink

